NAGARJUNA GOVERNMENT COLLEGE,

AUTONOMOUS:NALGONDA

www.ngcnalgonda.org

(Re Accredited by NAAC with "A" Grade)

DEPARTMENT OF COMPUTER SCIENCE

BOARD OF STUDIES MEETING

2017-18

BOARD OF STUDIES MEETING

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA (Autonomous) Reaccredited with "A" Grade by NAAC

(Affiliated to Mahatma Gandhi University)

DEPARTMENT OF COMPUTER SCIENCE BOARD OF STUDIES MEETING 2017-18 RESOLUTI ONS

The members of Board of studies in Computer Science Department, N.G. College, Nalgonda met under the chairmanship of **Sri M. Srinivas Reddy** on 13: 09 -2017 and passed the following Resolutions.

AGENDA:

- 1. To consider and approve the syllabus for B.Sc I,II,III years(I, II, III, IV,V &VI Semesters) during 2017-18.
- To consider and approve the introduction of Internal Assessment for the students admitted into I,II & III years degree course during 2017-18.
- 3. To consider and approve the model question paper for B.Sc I,II,&III year 2017-18
- 4. To consider and approve the list of examiners for paper setting, evaluation for B.Sc. I,II, & III year (I,II,III,IV,V & VI Semester) during 2017-18.
- 5. Any other related academic matters.

RESOLUTIONS:

- It is resolved to approve the Syllabus and Question papers Models for the I,II,III,IV,V
 and VI Semester for the year 2017-18 and also in authorized the chairman of Board of
 Studies to nominate panel of Examiners and paper setter.
- 2. It is resolved to adopt each semester is of 100 marks in which 70 Marks for Theory and 30 Marks for Internal Examinations (20 Marks for written examination 5 Marks for Assignment and 5 marks for Seminar) introduce for the year 2017-18 as per the direction of CCE, Hyd.
- 3. It is resolved to organize class wise and year wise Class Seminar, Group Discussion and Guest Lecture.
- Approved to conduct practical examination at the end of each semester for 1st year & 2nd year student and of sixth semesters for 3rd year students.
- 5. It is suggested to include course objectives and course outcomes for every subject.

| | | | | SIGNATURES |
|----|-----|------------------------------------|---------------------------------------|--|
| | | NAME | DESIGNATION | SIGNATURES |
| SL | NO. | Sri M. Srinivas Reddy | | |
| | | In-Charge Dept of Computer Science | Chairman Board of Studies | 410 |
| | 1 | N.G. College. | | GILLIK HAN Goard of Studies in Computer St Goard of Studies NALGONDA |
| | | Nalgonda. | · · · · · · · · · · · · · · · · · · · | N.G. College, NALGONDA |
| | | Prof.Dr.R.REKHA, | | |
| | | Chairman Board of Studies, | Hon'ble Member | |
| | 2 | Dept of Computer Science | Hou, Die Memoer | computer of computer |
| | | Mahatma Gandhi University | | Depois Information |
| | | Nalgonda. | W | Stence Gandhi Union Gandhi Unio |
| | | Sri K.Naga Raju | | Com Fr |
| | 3 | Govt.Degree Women's College. | Subject Expert | Depres College for Won. (A.P. |
| | | Nalgonda | | BOYL DEGIEE SONG |
| - | | T.Ravi Kumar | | Ho. |
| | | Kakathiya Degree.College | Subject Expert | Ran agin. Pacat COLLE |
| | 4 | Nalgonda. | | WAKATIVA PORO 08682 240 |
| | | | * | Marie No. |
| | | Sri SP.VENKAT RAMANA | | |
| | 5 | Contract Faculty Computer Science, | Member | En Con |
| | | N.G.College, Nalgonda. | | |
| | | Sri Y.Rukesh Kumar | | 2.60 |
| | 1 | (Guest Faculty) | Member | Kullan |
| | | N.G.College, Nalgonda | | |
| | L | | | |

NAGARJUNA GOVERNMENT COLLEGE: NALGONDA

(AUTONOMOUS)

(Re-Accredited with NAAC "A" GRADE)

Date | 8-09-2017

To

The Principal

N.G.College

Nalgonda.

Sir,

Sub:- Grant of Autonomous Status - Constitution of BOARD OF STUDIES in B.Sc Computer Science Department - Request for Approval - Reg.

Ref:-

- 1) No.F.22-1/2007(AC) Dt: 3rd April 2007
- 2) OU Lr.Mr.69/H/2007/Acad.Dt.12-06-2007.
- 3) GO RT.No.467 HE.(CE-1) Dept. Dt.29-06-2007.
- 4) MGU Lr.191/MGU/NLG/2015-16, Dt.28-08-2015.

With Reference to the Subject Cited above, I am submitting the List of members of

Board of Studies for Academic Years 2017-18 for your Approval.

| Board o | f Studies for Academic Years 2017-18 for your Approval. | DESIGNATION |
|---------|--|--------------------|
| S.No. | NAME Sri M. Srinivas Reddy | |
| 1 | In-Charge Dept of Computer Science N.G. College. Nalgonda. | CHAIRPERSON |
| 2 | Prof.Dr.R.REKHA, Chairman Board of Studies, Dept of Computer Science Mahatma Gandhi University Nalgonda. | UNIVERSITY NOMINEE |
| 3 | Sri . K.Naga Raju Govt.Degree Women's College. Nalgonda. | SUBJECT EXPERT |
| 4 | Sri. T.Ravi Kumar Kakatiya Degree College, Nalgonda. | SUBJECT EXPERT |
| 5 | Sri. SP.VENKAT RAMANA Contract Faculty Computer Science, N.G.College, Nalgonda. | MEMBER |
| 6 | Sri . Y.Rukesh Kumar Guest Faculty N.G.College, Nalgonda | MEMBER |

Submitted By

Proposal Approved

Chairman BOS Dept.of Computer Science Principal /Chair Person Acad Council

NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS): NALGONDA (Affiliated to Mathatma Gandhi University)

| | NAGA | (Affiliated to Mathatma Gandhi University) PANEL OF EXAMINERS FOR THE YEAR 2017-18 | | |
|--------|------|---|-----------------------|----------------------------------|
| | | | | |
| ubject | t: | COMPUTER SCIENCE | Phone Numbers | |
| SNO | | Name of the Examiners with Iuli Addresses | 9948226486 | |
| 1 | I | K.Naga Raju, Lect. In Computer Science, Govt. Women's College, Ramagir, Nalgonda. CH. Naveen, MSc(Comp.Sci.), M.Tech(C.S), SET, JAAGRUTHI DEGREE & PG CH. Naveen, MSc(Comp.Sci.) and Read BHONGIR-508116. Dist.Nalgonda | | |
| 2 | I | COLLEGE, NO 2-2-168, Azad Road, Briotonia | 9948781809 | |
| | I | Telangana State. M.Vijay, Computer Lecturer, Indian Institute of Management of Commerce, 6-1- | 8143567352 | |
| | П | M.Vijay, Computer Lecturer, Mariatabad, Hyderabad-04 91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04 K.Naga Raju, Lect. In Computer Science, Govt.Women's College, Ramagir, | 9948226486 | |
| | П | Nalgonda. T.Ravi Kumar Lect.in Computer Science, Kakatiya Degree College, Hyderabad Road, | 9963801656 | |
| 5 | | Nalgonda-508001. CH. Naveen, MSc(Comp.Sci.), M.Tech(C.S), SET, JAAGRUTHI DEGREE & PG COLLEGE, HNO 2-2-168, Azad Road, BHONGIR-508116. | 9948781809 | |
| 6 | П | Dist.Nalgonda Telangana State. K.Naga Raju, Lect. In Computer Science, Govt. Women's College, Ramagir, | 9948226486 | |
| 7 | Ш | Nalgonda. Computer Science Indian Institute of Management of | 9866260143 | |
| 8 | ш | M.Satyanaryana, Lecturer in Computer Science, Mairatabad, Hyderabad-04 Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04 T.Ravi Kumar Lect.in Computer Science Kakatiya Degree College,Hyderabad Road, | 9963801656 | |
| 9 | ш | Nalgonda-508001. K.Naga Raju, Lect. In Computer Science, Govt. Women's College, Ramagir, | 9948226486 | |
| 10 | IV | Nalgonda. | 9866260143 | |
| 11 | IV | M.Satyanaryana, Lecturer in Computer Science, Mataratabad, Hyderabad-04 Commerce, 6-1-91, Adj. Telephone Bhavan, Khairatabad, Hyderabad-04 Ravi Kumar Lect.in Computer Science Kakatiya Degree College, Hyderabad Road, | 9963801656 | |
| 12 | IV | 37.1 . 4- 609001 | 9866260143 | Tool |
| 13 | v | M.Satyanaryana, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04 | | - Da |
| 14 | 4 V | K.Prasanth Kumar, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91, Adj. Telephone Bhavan, Khairatabad, Hyderabad-04 | | |
| | | T.Ravi Kumar Lect.in Computer Science Kakatiya Degree College, Hyderabau Roa | 9963801656 | Ruly |
| 1: | | K.Naga Raju, Lect. In Computer Science, Govt. Women's College, Ramagir, | 9948226486 | _ |
| | 6 V | M.Vijay, Computer Lecturer, Indian Institute of Management of Commerce, 0-1 | 8143567352 | _ |
| - | 18 V | T.Ravi Kumar in Computer Science Kakatiya Degree Conogo, | 9985215987 | _ |
| - | | CH. Naveen, MSc(Comp.Sci.), M.Tech(C.S), SET, JAAGRUTHI DEGREE & F COLLEGE, HNO 2-2-168, Azad Road, BHONGIR-508116. Dist.Nalgonda | 9948781809 | - m |
| | 20 V | Telangana State. M.Satyanaryana, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91, Adj. Telephone Bhavan, Khairatabad, Hyderabad-04 | | CHAIRMA |
| - | 21 | T.Ravi Kumar in Computer Science Kakatiya Degree College, Hyderadad Road, | 9985215987 Board 9 | Studies in Con S. College, NA |
| - | | K.Naga Raju, Lect. In Computer Science, Govt. Women's College, Ramagir, | 99482264 | |
| | | Ravi Kumar in Computer Science Kakatiya Degree College, Hyderabad Road, | 9985215987 | |
| - | | National Community Lecturer, Indian Institute of Management of Commerce, | 8143567352 | TRER Scie |

Department of Computer dence a Informatics Gandhi University MAKATIN ROAD, NALGONDA.

HAYD ROAD, NALGONDA.

NO. 08682-248436

Dept. Degree College for War

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA DEPARTMENT OF COMPUTER SCIENCE ALLOCATION OF CREDITS AT SUBJECT LEVEL

| | URSE: SCIENCE | | CT: COMPU | | NCE | |
|------|--------------------------|-----------------------------|-----------|-------|---------------|--|
| S. N | Semester | Module(Paper) | Hours pe | | No. of credit | S |
| 1 | I (CORE) | Programme in C | 4 | 100 | 3 | |
| 2 | Practicals | C programming Lab | 3 | 50 | 2 | |
| 3 | II (CORE) | Programming in C++ | 4 | 100 | 3 | |
| 4 | Practicals | Programming in C++ Lab | 3 | 50 | 2 | |
| 5 | III (CORE) | Datastrucres using c++ | 4 | 100 | 3 | |
| 6 | Practicals | Datastrures using c++ LAB | 3 | 50 | 2 | |
| 7 | IV (CORE) | Database Management Systems | 4 | 100 | 3 | |
| 8 | Practicals | PL/SQL LAB | 3 | 50 | 2 | |
| 9 | V Core | Database Management Systems | 4 | 100 | 3 | |
| 10 | V Elective | Web Technologies | | 9 | 9 | |
| 10 | (Advanced) | OR | 3 | 100 | 2 | |
| 111 | V Elective (Advanced) | Mobile Communication | 3 | 100 | | Dury |
| 11 | Practicals | DBMS Lab | 3 | 50 | 2 | |
| 12 | VI Core | Database Management Systems | 4 | 100 | 3 | 0001 |
| 13 | VI Elective | Web Technologies | | | | Da |
| 13 | (Applied) | OR | 3 | 100 | 2 | |
| 14 | VI Elective (Applied) | Computer Networking | 3 | 100 | v | my |
| 15 I | Practicals | Web Programming Lab | 3 | 50 | 2 | CHAIRMAN Studies in Computer Scie College, NALGONDA. |
| 16 F | Project Work | Self Study &Skill Based | | Grade | N.G. | College, NALGONDA. |
| 17 (| Others | Ms-Office & DTP | 2 | 50 | | |

Revie Department of Computer VICTOR science & Informatics Mahatma Gandhi University Nalgonda-508 001.

-- bell.b.

KAKATE A DEGREE COLLEGE

KAKATE A DEGREE COLLEGE

Phone No: 08682-248436;

Chart Science Bamagiri. NALGONDA. (A.P.) Con Cour.

08'

Department of Computer Science

Nagarjuna Government College, Nalgonda

Name of the Module: C Programming

Nature of the Module: Core

Semester: I

Mode of Learning: Regular

2017-18

No. of Hours: 04

Credits: 03

Total Hours: 60

Subject: Computer Science

CURRICULAR PLAN

| r | | | Semester: I | 1 | | | _ |
|-------|----------------------|-----------------|---|------------------------|--|---------|-----------------|
| S. No | Month and Week | No. of Hours | Topic | Curricular Activity | Co-curricular Activity | Remarks | |
| 1 | June Π | 4 | Computer Fundamentals, classification of computers, Memory | Teaching | | | |
| 2 | June III | 4 | Programm Fundamentals, Classifying of Programming Languages, Compiler | Teaching | Assignment/Seminar /Question and Answers | | |
| 3 | June IV | 4 | Algorithm,Structred Programming Concept | Teaching | | 240 | |
| 4 | July I | 4 | Basic of C,Parts of Simple C program,C Tokens,Datatypes | Teaching | | | |
| 5 | July II | 4 | Input-Output Functions,Escape Sequences | Teaching | Assignment/Seminar /Question and Answers | | 100 |
| 6 | July III | 4 | Control Statements, If, If-Else, Nested If, Conditional Operators | Teaching | | | |
| 7 | July IV | 4 | Iterative Statements, While, Do-While, For loop | Teaching | Quiz | | D 660 |
| 8 | Aug I | 4 | Control Statements, Goto, Break, Continue | Teaching | Assignment/Seminar | | - Julie |
| 9 | Aug II | 4 | Functions ,Call-by-value,Call-by- reference,passing Arrays to functions | Teaching | Seminar | | |
| 10 | Aug III | 4 | Storage Classes,Inline functions,Recursion | Teaching | g | 8 | |
| 11 | Aug IV | 4 | Pointers,Introduction,Address of operarators,Uses of pointers | Teaching | Group Discussion | | |
| 12 | Sep I | 4 | Pointers and strings ,Pointers to pointers,Arrays of pointers | Teaching | | CHAU | KNIAN A |
| 13 | Sep II | | User defined Datatypes,declaring structure and its members | Teaching | Student Carrierard Counselling | | Computer Scient |
| 14 | Sep III | 4 | StructuresVs unions,Enumeration types,Files,Other file management functions | Teaching | Assignment/Seminar /Quiz | | 80VL |
| 15 | Sep IV | 4 | Revision of the Syllabus | Teaching | | | 0 |

Department of Computer
Department of Computer Science & Informatics Mahatma Gandhi University Nalgonda-508 001.

MARCHE NO: 08682-248430

Dest bedies College Williams CERTER CONFER TO CA.P.)

Name of the Module: C++ Programming

Semester: ||

Nature of the Module: Core

Subject: Computer Science

Mode of Learning: Regular

2017-18

No. of Hours: 04

Credits: 03

Total Hours: 60

CURRICULAR PLAN

| | | | Semester: II | | | | |
|----|---------|---|---|-----------------------------|--------------------------------|---------------|---|
| 2 | Nov II | 4 | c++ Introduction, Applications, C++ Tokens, Datatypes | Teaching & Practical (1 | | ır | |
| 3 | Nov III | 4 | Operators, Expressions, Contorl structures | Teaching & Practical (1) | | 2 | |
| 4 | Nov IV | 4 | Arrays, Strings, pointers, Searchin and sorting Arrays | Teaching & Practical (1) | | | |
| 5 | Dec I | 4 | Object Oriented Programming.Benefits of OOPs Languages,and OOP Applications | Teaching & Practical (1) | | r | |
| 6 | Dec II | 4 | Classes,Introduction,Defining an Instance of a Class,Inline Member Functions | Teaching & Practical (1) | | | |
| 7 | Dec III | 4 | Constructors, Destructors, Overloading Constructors, | Teaching & Practical (1) | | | 2 |
| 8 | Dec IV | 4 | Inheritance: Introduction, Protected Members and Class Access, Base Class Access Specification | Teaching & Practical (1) | Assignment/Seminar | | |
| 9 | Jan I | 4 | Inline Member Functions, Constructors, Passing Arguments to Constructors, Destructors, Overloading Constructors | Teaching & Practical (1) | Seminar | | |
| 10 | Jan II | 4 | Member-wise Assignment, Copy Constructors, Operator Overloading, Object Conversion, Aggregation. | Teaching & Practical (1) | | * | Duran |
| 11 | Jan III | 4 | Inheritance: Introduction, Protected Members and Class Access, Base Class Access Specification, Constructor | Teaching & Practical (1) | Group Discussion | | |
| 12 | Jan IV | 4 | C++ Streams: Stream Classes, Unformatted I/O Operations, Formatted I/O Operations. | Teaching & Practical (1) | | | Soor |
| 13 | Feb I | 4 | Exceptions: Introduction, Throwing an Exception, Handling an Exception, Object-Oriented Exception Handling | Teaching & Practical (1) | Student Carrier Counselling | | |
| 14 | Feb II | 4 | Templates:Function Templates-Introduction, Function Templates with Multiple Type | | Assignment/Seminar /Quiz | | m |
| 15 | Feb III | 4 | | Teaching & Practical (1) | | CF of Stud | ALKMAN es in Computer Scientinge, NALGONDA. |
| 16 | Feb IV | 4 | | Teaching & Practical (1) | | N G Col | loge, 1 |

Department of Computer Science & Informatics Mahatma Gandhi University Nalgonda-508 001.

WAKATIYA DEGREE COLLEGE WAKATIYA DEGREE CONDA: HYD. Road, NALGONDA: Phone No: 08682-248436;

Dept. Degree Dalle ge hop A. (A.P.)

Name of the Module: OBJECT ORIENTED PROGRAMMING WITH JAVA

Nature of the Module: Core

Semester: III

Mode of Learning: Regular

2017-18

No. of Hours: 04

Credits: 03

Total Hours: 60

Subject: Computer Science

CURRICULAR PLAN

| S. No | Month and Week | No. of Hours | Topic | Curricular Activity | Co-curricular Activity | Remarks | |
|-------|-------------------|-----------------|--|------------------------|---|------------------------|-------------------|
| 1 | June II | 4 | Fundamental Concepts: Introduction to Data Structures, Types of Data | Teaching | 9 | | ¥ |
| 2 | June III | 4 | Linear Data Structure Using Arrays: 1-D Arrays, 2-D Arrays, N-D Arrays, Memory | Teaching | Assignment/Seminar/Questi on and Answers | ā | |
| 3 | June IV | 4 | Concept of Ordered List, String Manipulation, Pros and Cons of Arrays | Teaching | | | |
| 4 | July I | 4 | Stacks: Concept, Primitive Operations, Abstract Data Type, Representation Stacks | Teaching | | | |
| 5 | July II | 4 | Applications of Stacks– Converting Infix Expression to Postfix Expression | Teaching | Assignment/Seminar/Questi on and Answers | | |
| 6 | July III | 4 | RECURSION: Introduction, Recurrence, Use of Stack in Recursion, Variants of Recursion, | Teaching | | | |
| 7 | July IV | 4 | QUEUES: Concept, Primitive Operations, Abstract Data Type, Representation Queues | Teaching | Quiz | | |
| 8 | Aug I | 4 | LINKED LISTS: Introduction, Concept, Terminology, Primitive Operations-creating, | Teaching | Assignment/Seminar | | Lu |
| 9 | Aug II | 4 | TREES: Introduction, Representation of a General Tree, Binary Tree | Teaching | Seminar | | |
| 10 | Aug III | 4 | GRAPHS: Introduction, Graph Abstract Data Type, Representation of Graphs, | Teaching | | , K | 200el |
| 11 | Aug IV | 4 | Selection Sort, Quick Sort, Merge Sort, and Comparison of Sorting Techniques. | Teaching | Group Discussion | | |
| 12 | Sep I | 4 | Depth-First Search, Breadth- First Search, Spanning Tree – Prim's Algorithm, Kruskal's | Teaching | | | m |
| 13 | Sep II | 4 | Quick Sort, Merge Sort, and Comparison of Sorting Techniques. | Teaching | Student Carrier Counselling | CHAIK of Studies in | MAN Cemputer S |
| 14 | Sep III | 4 | HEAPS: Concept, Implementation, Abstract Data Type, Heap Sort. | Teaching | Assignment/Seminar/Quiz | G. College. | Maria |
| 15 | Sep IV | 4 | Revision of the Syllabus | Teaching | | | |

Reel KIT TO STATE OF THE STATE OF TH Department of Computer Science & Informatics Mahatma Gandhi University Nalgonda-508 001.

MAKATIVA DECREE COLLEGE MAKATIVA DECREE COLLEGE NALGONDA: Phone No: 08682-248438; Phone No: 08682-248438;

Name of the Module: JAVA AND DATA STRUCTURES WITH JAVA

Semester: IV

Total Hours: 60

Nature of the Module: Core

Mode of Learning: Regular

2017-18

No. of Hours: 04

Credits: 03

Subject: Computer Science

CURRICULAR PLAN

| S. No | Month and Week | No. of Hours | Topic | Curricular Activity | Co-curricular Activity | Remarks | e |
|-------|-------------------|-----------------|---|-----------------------------|---|-------------|----------------------|
| 1 | Nov II | 4 | INTRODUCTION TO DATABASES: Introduction, Traditional File-Based | Teaching & Practical (1) | Assignment/Seminar/Questi on and Answers | | |
| 2 | Nov III | 4 | Advantages and Disadvantages of DBMSs, The Three-Level ANSI- | Teaching & Practical (1) | ¥ | | e |
| 3 | Nov IV | 4 | RELATIONAL MODEL: Introduction, Terminology, Integrity Constraints, Views. | Teaching & Practical (1) | | 20 | |
| 4 | Dec I | 4 | THE RELATIONAL ALGEBRA: Unary Operations, Set Operations, Join | Teaching & Practical (1) | Assignment/Seminar/Questi on and Answers | a 8 | |
| 5 | Dec II | 4 | SQL: Introduction, Data Manipulation–Simple Queries, Sorting Results, Using the | Teaching & Practical (1) | | | F |
| 6 | Dec III | 4 | SQL: The ISO SQL Data Types, Integrity Enhancement Feature–Domain Constraints, | Teaching & Practical (1) | Quiz | 1 | - A |
| 7 | Dec IV | 4 | Data Definition–Creating a Database, Creating a Table, Changing a Table Definition, | Teaching & Practical (1) | Assignment/Seminar | | |
| 8 | Jan I | 4 | ADVANCED SQL: The SQL Programming Language–Declarations, | Teaching & Practical (1) | Seminar | | Dury |
| 9 | Jan II | 4 | ENTITY-RELATIONSHIP MODELING: Entity Types, Relationship Types, | Teaching & Practical (1) | | | |
| 10 | Jan III | 4 | ENHANCED ENTITY-RELATIONSHIP MODELING: | Teaching & Practical (1) | Group Discussion | 2 2 | Call |
| 11 | Jan IV | 4 | FUNCTIONAL-DEPENDENC IES: Anomalies, Partial Functional Dependency, | Teaching & Practical (1) | | v | 80m |
| 12 | Feb I | 4 | NORMALIZATION: The Purpose of Normalization, How Normalization Supports | Teaching & Practical (1) | Student Carrier Counselling | | my |
| 13 | Feb II | 4 | TRANSACTION MANAGEMENT: Transaction Support–Properties of | Teaching & Practical (1) | Assignment/Seminar/Quiz | r conding | IRMAN in Computer Sc |
| 14 | Feb III | 4 | Revision of the Syllabus | Teaching & Practical (1) | 801 | N.G. Collec | NALGONDA |
| 15 | Feb IV | 4 | Remedial Classes | Teaching & Practical (1) | | | |

Department of Computer Science & Informacics Mahatma Gandhi University, Nalgonda-508 001.

KAKATIVA DEGREE COLLEGE
WAKATIVA DEGREE CONDA.
HYD. Road, NALGONDA.
Phone No. 08682-248436

Dept. of Computer Science Govt. Degree College for Wona BOVI. DEGREE LOTTEGE TOT WORK.

Name of the Module: Data Base Management

Nature of the Module: Core

2017-

Mode of Learning: Regular No. of Hours: 04

Credits: 03

2017-18

Total Hours: 60

Semester: V

Subject: Computer Science

CURRICULAR PLAN

| | | | Semester: | | | | |
|-------|-------------------|-----------------|---|------------------------|---|-------------------------------|------------|
| S. No | Month and Week | No. of Hours | Topic | Curricular Activity | Co-curricular Activity | Remarks | |
| 1 | June II | 4 | DATABASE SYSTEMS: Introducing the database ,Historical Roots, | Teaching | | | ta |
| 2 | June III | 4 | DATA MODELS: The importance of Data models, Data Model Basic Building Blocks. | Teaching | Assignment/Seminar/Questi on and Answers | | |
| 3 | June IV | 4 | The Relational Database Model: A logical view of Data, Keys, Integrity Rules. | Teaching | | - | |
| 4 | July I | 4 | Relationships with in the Relational Database, Data Redundancy revisited, Indexes. | Teaching | | | ı |
| 5 | July II | 4 | Entity Relationship Model: The ER Model, Developing ER Diagram | Teaching | Assignment/Seminar/Questi on and Answers | | <u>V</u> |
| 6 | July III | 4 | Advanced Data Modeling: The Extended Entity Relationship Model | Teaching | a - 1 | | The second |
| 7 | July IV | 4 | Entity integrity: Selecting Primary keys, Design Cases: Learning Flexible Database Design | Teaching | Quiz | | Du |
| 8 | Aug I | 4 | Normalization of database tables: Database Tables and Normalization. | Teaching | Assignment/Seminar | | |
| 9 | Aug II | 4 | Normalization and database design, demoralization. | Teaching | Seminar | | Sary |
| 10 | Aug III | 4 | Introduction to SQL: Data Definition Commands | Teaching | | <i>i</i> | 0000 |
| 11 | Aug IV | 4 | Data Manipulation Commands, Select Quiries | Teaching | Group Discussion | * e | ~^ |
| 12 | Sep I | 4 | Advanced Data Definition Commands, Advanced Select queries, Virtual Tables | Teaching | 4 | HARRIAN | |
| 13 | Sep II | 4 | Joining Database Tables | Teaching | Student Carrie Goods Phing | idies in Comp oliege, NALG | ondA |
| 14 | Sep III | 4 | ADVANCED SQL: Relational Set OperatorsSub queries and correlated queries. | Teaching | Assignment/Seminar/Quiz | | |
| 15 | Sep IV | - 4 | Revision of the Syllabus | Teaching | -68 | S Co | ŧ |

Department of Computer

Depart

KARAD ROSO 08682-248438

Dept. of Computer Science

Confidence College for Wome

Govt. Degree College for WALGONDA. (A.P.

Name of the Module: WEB PROGRAMMIG

Nature of the Module: Core

Mode of Learning: Regular

2017-18

No. of Hours: 04 Credits: 03 Semester: V

Subject: Computer Science

Total Hours: 60

CURRICULAR PLAN

| | | 74 | Semester: | | | |
|-------|-------------------|-----------------|--|------------------------|---|---|
| S. No | Month and Week | No. of Hours | Торіс | Curricular Activity | Co-curricular Activity | Remarks |
| 1 | June II | 4 | Introduction to Internet, Networks | Teaching | | |
| 2 | June III | 4 | Intrduction to HTML,Basic HTML,History | Teaching | Assignment/Seminar/Questi on and Answers | |
| 3 | June IV | 4 | Introduction to XML concepts | Teaching | | |
| 4 | July I | 4 | World wide web,URL | Teaching | | |
| 5 | July II | 4 | The Document body, Text, Hyperlinks, | Teaching | Assignment/Seminar/Questi on and Answers | |
| 6 | July III | 4 | Adding more formatting, Lists | Teaching | a | |
| 7 | July IV | 4 | Tables, Using colors and images, Images. | Teaching | Quiz | |
| 8 | Aug I | 4 | MORE HTML: Multimedia objects, Frames | Teaching | Assignment/Seminar | |
| 9 | Aug II | 4 | Forms-towards interactivity, The HTML document Head in detail, XHTML | Teaching | Seminar | |
| 10 | Aug III | 4 | CASCADING STYLE SHEETS: Introduction, Using styles: | Teaching | | 4 |
| 11 | Aug IV | 4 | Defining your own styles, Properties and values in styles | Teaching | Group Discussion | Citalia |
| 12 | Sep I | 4 | Style sheets- A worked example, Formatting blocks of information, Layers. | Teaching | 80: | CHAIR and of Studies in N.G. College, 1 |
| 13 | Sep II | 4 | An introduction to Java Script: What is dynamic html, Java Script | Teaching | Student Carrier Counselling | - |
| 14 | Sep III | 4 | The basics, Variables, String manipulation, Mathematical functions, Statements, Operators, | Teaching | Assignment/Seminar/Quiz | |
| 15 | Sep IV | 4 | Revision of the Syllabus | Teaching | COLLEGE | 97 |

Department of Computer Science & Informatics Mahatma Gandhi University, Mainanda-508 001.

HYD. Road 08682 24843

te

Name of the Module: Data Base Management

Nature of the Module: Core

Mode of Learning: Regular

No. of Hours: 04

Credits: 03

Semester: VI

Subject: Computer Science

2017-18 Total Hours: 60

CURRICULAR PLAN

| S. No | Month and Week | No. of Hours | Semester: Topic | Curricular Activity | Co-curricular Activity | Remarks |
|-------|-------------------|-----------------|--|-----------------------------|---|-------------------------------|
| 1 | Nov II | 4 | DATABASE DESIGN: The Information systen,SDLC,DBLC | Teaching & Practical (1) | Assignment/Seminar/Questi on and Answers | : |
| 2 | Nov III | 4 | Database Design Strategies, Centralized Vs Decentralized design. | Teaching & Practical (1) | | |
| 3 | Nov IV | 4 | Transaction Management and Concurency Control | Teaching & Practical (1) | s) | |
| 4 | Dec I | 4 | concurrency control with optimistic methods, database recovery management. | Teaching & Practical (1) | Assignment/Seminar/Questi on and Answers | |
| 5 | Dec II | 4 | Distributed database management system, Evolution of DDMS | Teaching & Practical (1) | 9 | |
| 6 | Dec III | 4 | Data and Process distribution, Distributed database Transparency Features, | Teaching & Practical (1) | Quiz | |
| 7 | Dec IV | 4 | Distributed Transparency, Transaction TransparencyClient Server VS DDBMS. | Teaching & Practical (1) | Assignment/Seminar | |
| 8 | Jan I | 4 | THE DATA WAREHOUSE: The need for data analysis, Decision support systems | Teaching & Practical (1) | Seminar | |
| 9 | Jan II | 4 | Star schemas, Data mining, SQL extension for OLAP. | Teaching & Practical (1) | | |
| . 10 | Jan III | 4 | Database AdminstrationThe need for and role of databases | Teaching & Practical (1) | Group Discussion | i |
| 11 | Jan IV | 4 | The evolution of the database administration function. | Teaching & Practical (1) | | CHAIR |
| 12 | Feb I | 4 | Database administration Tools | Teaching & Practical (1) | Student Carrier Counselling | of Studies in .G. College, |
| 13 | Feb II | 4 | The DBA at work: Using Oracle for Database Administration. | Teaching & Practical (1) | Assignment/Seminar/Quiz | |
| 14 | Feb III | 4 | Revision of the Syllabus | Teaching & Practical (1) | | |
| 15 | Feb IV | 4 | Remedial Classes | Teaching & Practical (1) | | Conte |

Pendartment of Computer

Department of Computer

Department of Computer

Science & Informatics

Science & Informat

Name of the Module: WEB PROGRAMMIG

Semester: VI

Nature of the Module: Core

Subject: Computer Science

Mode of Learning: Regular

2017-18

No. of Hours: 04

Credits: 03

Total Hours: 60

CURRICULAR PLAN

| No | Month and Week | No. of Hours | Topic | Curricular Activity | Co-curricular Activity | Remarks | |
|----|-------------------|-----------------|--|-----------------------------|---|-------------------|----|
| 1 | Nov II | 4 | Objects in Java Script: Data and objects in java script | Teaching & Practical (1) | Assignment/Seminar/Questi on and Answers | | |
| 2 | Nov III | 4 | Regular expressions, Exception Handling, Built in objects, Events | Teaching & Practical (1) | | | |
| 3 | Nov IV | 4 | Dynamic HTML with Java Script: Data validation, Opening a new window | Teaching & Practical (1) | 2 | | |
| 4 | Dec I | 4 | Messages and Confirmations, The status bar, Writing to a different frame, Rollover buttons | Teaching & Practical (1) | Assignment/Seminar/Questi on and Answers | 2 | |
| 5 | Dec II | 4 | Moving images, Multiple pages in a single download, A text-only menu system, Floating logos. | Teaching & Practical (1) | | 1 | 2 |
| 6 | Dec III | 4 | Active Server Pages and Java: Active Server Pages, Java. | Teaching & Practical (1) | V | | |
| 7 | Dec IV | 4 | XML: Defining Data for Web applications: Basic XML | Teaching & Practical (1) | | | |
| 8 | Jan I | 4 | Document type definition, XML schema, | Teaching & Practical (1 | 00 | | Ð |
| 9 | Jan II | 4 | Document Object Model, Presenting X | Teaching & Practical (1 | _ \ | | |
| 10 |) Jan III | 1 4 | Good Design: Structure, Tables versus Frames, Accessibility, Internationalization, Exercises | Teaching & Practical (| 1 Oloup 2.0 | | |
| 1 | 1 Jan IN | v 4 | Useful Software: Web browsers, Perl, Web servers, mod_perl, Databases, Accessing your ISP | Teaching (| (1) | 0 | ~ |
| 1 | 2 Feb ! | I 4 | Protocols: Protocols, IP and TCP, Hyper Text Transfer Protocol, Common Gateway Interface. | Teaching Practical (| & Student Carrier Counself | ing Studies in Co | mp |
| 1 | Feb l | п 4 | The Document Object Model, | Teaching Practical | & Assignment/Seminar/Qu | ıiz | |
| | 14 Feb | III 4 | | Teaching Practical | | | |
| - | 15 Feb | IV | 4 Remedial Classes | Teaching Practical | (1) | on the | |

Relative to Computer Department of Computer Supportments Science & Informatics Science a mjorman or sity.

Mabatma Gandhi University.

KAKATIVA DE NALGONDA. ROBONO: 08682-248436

EECTURER. Dept. of Computer Science Govt. Degree Cellege for Wom. Bamagiri, NALGONDA. (A.P.

 \bigcirc

J

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA

(AUTOTONOMOUS) (Re Accredited by NAAC with "A" Grade)

DEPARTMENT OF COMPUTER SCIENCE

B.Sc. (COMPUTER SCIENCE) I YEAR (2017-18)

SEMESTER: I PAPER- I

SUBJECT:- PROGRAMMING IN C

UNIT - I

COMPUTER FUNDAMENTALS: Introduction of Computers, Classification of Computers, Anatomy of a Computer, Memory Hierarchy, Introduction to OS, Operational Overview of a CPU.

PROGRAM FUNDAMENTALS: Generation and Classification of Programming Languages, Compiling, Interpreting, Loading, Linking of a Program, Developing Program, Software Development.

ALGORITHMS: Definitions, Different Ways of Stating Algorithms (Step-form, Pseudocode, Flowchart), Strategy for Designing Algorithms, Structured Programming Concept. BASICS OF C: Overview of C, Developing Programs in C, Parts of Simple C Program, Structure of a C Program, Comments, Program Statements, C Tokens, Keywords, Identifiers, Data Types, Variables, Constants, Operators and Expressions, Expression Evaluation—precedence and associatively, Type Conversions.

UNIT - II

INPUT-OUTPUT: Non-formatted and Formatted Input and Output Functions, Escape Sequences,

CONTROL STATEMENTS: Selection Statements – if, if-else, nested if, nested if-else, comma operator, conditional operator, switch; Iterative Statements—while, for, dowhile; Special Control Statement—goto, break, continue, return, exit.

ARRAYS AND STRINGS: One-dimensional Arrays, Character Arrays, Functions from ctype.h, string.h, Multidimensional Arrays.

UNIT - III

FUNCTIONS: Concept of Function, Using Functions, Call-by-Value Vs Call-by-reference, Passing Arrays to Functions, Score of Variables, Storage Classes, Inline Functions, and Recursion.

POINTERS: Introduction, Address of Operator (&), Pointer, Uses of Pointers, Arrays and Pointers, Pointers and Strings, Pointers to Pointers, Array of Pointers, Pointer to Array, Dynamic Memory Allocation.

UNIT - IV

USER-DEFINED DATA TYPES: Declaring a Structure (Union) and its members, Initialization Structure (Union), Accessing members of a Structure (Union), Array of Structures (Union), Structures Vs Unions, Enumeration Types.

FILES: Introduction, Using Files in C, Working with Text Files, Working with Binary Files, Files of Records, Random Access to Files of Records, Other File Management Functions.

Text book pradipDey, Manas Ghosh Computer Fundamentals and Programming in C(2e)

References

1.Ivor Horton, Beginning C

2. Herbert Schildt, The Complete Reference C

3. Paul Deitel, Harvey Deitel, C How To Program

4.Byron S. Gottfried, Theory and Problems of Programming with C

5. Brian W. Kernighan, Dennis M. Ritchie, The C Programming Language

6.B. A. Forouzan, R. F. Gilberg, A Structured Programming Approach Using C

WAKATIVA DECREE COLLEGE
WAKATIVA DECREE CONDA:
NO: 08682-248436)

1 of 2)

OF COMPUTER SCIEDCE

Computer for Wom'r.

Dept. Degree College for WA.P.)

Govi. Degree College NOA. (A.P.)

Board of Studies in Computer Sc N.G. College, NALGONDA.

Department of Computer Science & Information University.

Mahatma Gandhi University.

Mahatma Gandhi 508 001.

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA

(AUTOTONOMOUS) (Re Accredited by NAAC with "A" Grade)

DEPARTMENT OF COMPUTER SCIENCE B.Sc. (COMPUTER SCIENCE) I YEAR (2017-18) **SEMESTER: II PAPER - II**

SUBJECT:- PROGRAMMING IN C++

UNIT - I

INTRODUCTION TO C++: Applications, Example Programs, Tokens, Data Types, Operators, Expressions, Control Structures, Arrays, Strings, Pointers, Searching and Sorting Arrays.

FUNCTIONS: Introduction, Prototype, Passing Data by Value, Reference Variables, Using Reference Variables as Parameters, Inline Functions, Default Arguments, Overloading Functions, Passing Arrays to Functions. Object-oriented Programming: Procedural and Object-Oriented Programming, Terminology, Benefits, OOP Languages, and OOP Applications.

UNIT - II

CLASSES: Introduction, Defining an Instance of a Class, Why Have Private Members? Separating Class Specification from Implementation, Inline Member Functions, Constructors, Passing Arguments to Constructors, Destructors, Overloading Constructors, Private Member Functions, Arrays of Objects, Instance and Static Members, Friends of Classes, Member-wise Assignment, Copy Constructors, Operator Overloading, Object Conversion, Aggregation.

UNIT-III

INHERITANCE: Introduction, Protected Members and Class Access, Base Class Access Specification, Constructors and Destructors in Base and Derived Classes, Redefining Base Class Functions, Class Hierarchies, Polymorphism and Virtual Member Functions, Abstract Base Classes and Pure Virtual Functions, Multiple Inheritance. C++ STREAMS: Stream Classes, Unformatted I/O Operations, Formatted I/O Operations.

UNIT - IV

EXCEPTIONS: Introduction, Throwing an Exception, Handling an Exception, Object-Oriented Exception Handling with Classes, Multiple Exceptions, Extracting Data from the Exception Class, Re-throwing an Exception, Handling the bad_alloc Exception.

TEMPLATES: Function Templates-Introduction, Function Templates with Multiple Type, Overloading with Function Templates, Class Templates - Introduction, Defining

Objects of the Class Template, Class Templates and Inheritance, Introduction to the STL. **Text** Tony Gaddis, Starting out with C++: from control structures through objects(7e)

References B. Lippman, C++ Primer Bruce Eckel, Thinking in C++

K.R. Venugopal, Mastering C++
 Herbert Schildt, C++: The Complete Reference
 BjarneStroustrup, The C++ Programming Language

6. SouravSahay, Object Oriented Programming with C++

KAKATIVA DEGREE COLLEGE ANYD. Road, NALGONDA. . No: 08682 248436

Bank Dedise College for Mome. Bamagiri, NALGONDA. (A.P.)

CHAIR

Board of Studies in .

W.G. College

Department of Computer Science & Informatics hatma Gandhi University

COMPUTER SCIENCE 1 OF 2

NAGARJUNA GOVT. DEGREE COLLEGE : NALGONDA

(AUTOTONOMOUS) (Re Accredited by NAAC with "A" Grade)

DEPARTMENT OF COMPUTER SCIENCE

B.Sc. (COMPUTER SCIENCE) II YEAR (2017-18)

SEMESTER: III PAPER- III

DATA STRUCTURES

UNIT - I

Fundamental Concepts: Introduction to Data Structures, Types of Data Structures, Introduction to Algorithm, Pseudo-code, Flow Chart, Analysis of Algorithms.

Linear Data Structure Using Arrays: 1-D Arrays, 2-D Arrays, N-D Arrays, Memory Representation and Address Calculation of 1-D, 2-D, N-D Arrays, Concept of Ordered List, String Manipulation, Pros and Cons of Arrays.

Stacks: Concept, Primitive Operations, Abstract Data Type, Representation Stacks Using Arrays, Prefix, Infix, Postfix Notations for Arithmetic Expression, Applications of Stacks-Converting Infix Expression to Postfix Expression, Evaluating the Postfix Expression, Checking Well-formed (Nested) Parenthesis, Processing of Function Calls, Reversing a String.

UNIT - II

RECURSION: Introduction, Recurrence, Use of Stack in Recursion, Variants of Recursion, Execution of Recursive Calls, Recursive Functions, Iteration versus Recursion.

QUEUES: Concept, Primitive Operations, Abstract Data Type, Representation Queues Using Arrays, Circular Queue, Double-Ended Queue, Applications of Queues.

LINKED LISTS: Introduction, Concept, Terminology, Primitive Operations-creating, inserting, deleting, traversing, Representation of Linked Lists, Linked List Abstract Data Type, Linked List Variants – Singly Linked List, Doubly Linked List, Linear and Circular Linked List, Representation Stacks and Queues Using Linked Singly Lists, Application of Linked List-Garbage Collection.

UNIT - III

TREES: Introduction, Representation of a General Tree, Binary Tree Introduction, Binary Tree Abstract Data Type, Implementation of Binary Trees, Binary Tree Traversals -Preorder, Inorder, Postorder Traversals, Applications of Binary Trees Briefly.

GRAPHS: Introduction, Graph Abstract Data Type, Representation of Graphs, Graph Traversal - Depth-First Search, Breadth-First Search, Spanning Tree - Prim's Algorithm, Kruskal's Algorithm. Hashing: Introduction, Hash Functions, Collision Resolution Strategies.

UNIT - IV

SEARCHING AND SORTING: Sequential (Linear) Search, Binary Search, Bubble Sort, Insertion Sort, Selection Sort, Quick Sort, Merge Sort, and Comparison of Sorting Techniques.

HEAPS: Concept, Implementation, Abstract Data Type, Heap Sort.

Text books Varsha H. Patil, Data Structures Using C++ References books Nell Dale, C++ Plus Data Structures

Seymor Lipschutz, Data Structures (Revised 1e)

Adam Drozdek, Data Structures and Algorithms in C++

Mark Allen Weiss, Data structures and Algorithm Analysis in C++ (4e)

Board of Studies in Computer S. D.S. Malik, C++ Programming: Program Design Including Data Structures (6e) Michael Main, Walter Savitch, Data Structures and Other Objects Using C++ (4e) Michael T. Goodrich, R. Tamassia, David M. Mount, Data Structures and Algorithms in C++

Yonghui Wu, Jiande Wang, Data Structure Practice for Collegiate Programming Contests and Education

Kul Department of Con Science & informatics Mahatma Gandhi University Nalgonda-508 001.

YD. Road 08682-2484

JOH! Wegree Coilege for Women, A.P.) Con Dedice College

leto

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA

(AUTOTONOMOUS) (Re Accredited by NAAC with "A" Grade)

DEPARTMENT OF COMPUTER SCIENCE

B.Sc. (COMPUTER SCIENCE) II YEAR (2017-18) SEMESTER: IV PAPER- IV

DATABASE MANAGEMENT SYSTEMS

UNIT - I

INTRODUCTION TO DATABASES: Introduction, Traditional File-Based Systems, Database Approach, Roles in the Database Environment, Advantages and Disadvantages of DBMSs, The Three-Level ANSI-SPARC Architecture, Database Languages, Data Models, Functions of a DBMS, Components of a DBMS.

RELATIONAL MODEL: Introduction, Terminology, Integrity Constraints, Views.

THE RELATIONAL ALGEBRA: Unary Operations, Set Operations, Join Operations, Division Operation, Aggregation and Grouping Operations.

SQL: Introduction, Data Manipulation-Simple Queries, Sorting Results, Using the SQL Aggregate Functions, Grouping Results, Sub-queries, ANY and ALL, Multi-table Queries, EXISTS and NOT EXIST, Combining Result Tables, Database Updates.

SQL: The ISO SQL Data Types, Integrity Enhancement Feature-Domain Constraints, Entity Integrity, Referential Integrity, General Constraints, Data Definition-Creating a Database, Creating a Table, Changing a Table Definition, Removing a Table, Creating an Index, Removing an Index, Views-Creating a View, Removing a View, View Resolution, Restrictions on Views, View Updatability, WITH CHECK OPTION, Advantages and Disadvantages of Views, View Materialization, Transactions, Discretionary Access Control-Granting Privileges to Other Users, Revoking Privileges from Users.

ADVANCED SQL: The SQL Programming Language-Declarations, Assignments, Control Statements, Exceptions, Cursors, Subprograms, Stored Procedures, Functions, and Packages, Triggers, Recursion.

UNIT - III

ENTITY-RELATIONSHIP MODELING: Entity Types, Relationship Types, Attributes, Keys, Strong and Weak Entity Types, Attributes on Relationships, Structural Constraints, Problems with ER Models-Fan Traps, Chasm Traps.

ENHANCED ENTITY-RELATIONSHIP MODELING: Specialization/Generalization, Aggregation, Composition.

FUNCTIONAL-DEPENDENCIES: Anomalies, Partial Functional Dependency, Transitive Functional Dependency, Multi Valued Dependency, Join Dependency.

NORMALIZATION: The Purpose of Normalization, How Normalization Supports Database Design, Data Redundancy and Update Anomalies, Functional Dependencies in brief, The Process of Normalization, 1NF, 2NF, 3NF, BCNF. The Database Design Methodology for Relational Databases (Appendix-D).

UNIT - IV

TRANSACTION MANAGEMENT: Transaction Support-Properties of Transactions, Database Architecture, Concurrency Control-The Need for Concurrency Control Serializability and Recoverability, Locking Methods, Deadlock, Time Stamping Methods, Multi-version Timestamp Ordering, Optimistic Techniques, Granularity of Data Items, Database Recovery—The Need for Recovery, Transactions and Recovery, Recovery Facilities Recovery Techniques. Nested Transaction Model.

SECURITY: Database Security—Threats, Computer-Based Controls—Authorization, Access Controls, Views, Backup and Recovery, Integrity, Encryption, RAID.

Thomas M. Connolly, Carolyn E. Begg, Database Systems-A Practical Approach to Design, Implementation, and Management (6e)

References Sharon Allen, Evan Terry, Beginning Relational Data Modeling Jeffrey A. Hoffer, V. Ramesh, Heikki Topi, Modern Database Management Raghu Ramakrishnan, Johannes Gehrke, Database Management Systems Ramez Elmasri, Shamkant B. Navathe, Fundamentals of Database Systems Abraham Silberschatz, Henry F. Korth, S. Sudarshan, Database System Concepts

C Coronel S Morris Peter Rob Database Systems: Design Computer of computer Department Department of Computer Department Dep Science & Informatics Mahatma Gandhi University.

Jystems

Jys

h Computer NALGON

Boyl Dedice College for Name Ramadiri. NALGONDA. (A.P.)

NAGARJUNA GOVT. DEGREE COLLEGE:NALGONDA (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE B.Sc III YEAR(2017-18) SEMESTER-V PAPER-V

SYLLABUS

DATABASE MANAGEMENT SYSTEMS

UNIT-I

Database Systems Introduction And Fundamentals

DATABASE SYSTEMS: Introducing the database and DBMS, Why the database is important.

Historical Roots: Files and File Systems, Problems with File System Data Management, Database Systems,

Data Modeling

DATA MODELS: The importance of Data models, Data Model Basic Building Blocks, Business Rules, The evaluation of Data Models, Degree of Data Abstraction.

UNIT-II

The Relational Database Model: A logical view of Data, Keys, Integrity Rules, Relational Set Operators, The Data Dictionary and the system catalog, Relationships with in the Relational Database, Data Redundancy revisited, Indexes, Codd's relational database rules. Entity Relationship Model: The ER Model, Developing ER Diagram, Database Design Challenges: Conflicting Goals.

UNIT-III

Advanced Data Modeling: The Extended Entity Relationship Model, Entity clustering, Entity integrity: Selecting Primary keys, Design Cases: Learning Flexible Database Design. Normalization of database tables: Database Tables and Normalization, The need for Normalization, The Normalization Process, Improving the design, Surrogate Key Considerations, High level Normal Forms, Normalization and database design, demoralization.

UNIT-IV

Introduction to SQL: Data Definition Commands, Data Manipulation Commands, Select queries, Advanced Data Definition Commands, Advanced Select queries, Virtual Tables, Joining Database Tables.

ADVANCED SQL: Relational Set Operators, SQL Join Operators, Sub queries and correlated queries, SQL Functions, Oracle Sequences, Updatable Views, and Procedural SQL.

Prescribed Text Book: Peter Rob, Carlos Coronel, Database Systems Design, Implementation and Management, Seventh Edition, Thomson (2007)

Reference Books:

- Elimasri / Navathe, Fundamentals of Database Systems, Fifth Edition, Pearson Addison Wesley (2007).
- Raman A Mata Toledo/Panline K Cushman, Database Management Systems, Schaum's Outlibe series, Tata McGraw Hill (2007).
- Systems: An application oriented Approach, second edition, pearson education (2008). H.G. College, Atul Kahate, Introduction to Database Management Systems. C.J.Date, A.Kannan, S.Swamynathan, An Introduction to Database Systems, Eight

Science & informatics Mahatma Gandhi University Nalgonda-508 001.

WAKATIVA DECREE COLLEGE NAL GONDA: No: 08682-248436

Govt. Dedree College for Women Ramagirl, NALGONDA. (A.P.)

CHAIR

NAGARJUNA GOVT. DEGREE COLLEGE:NALGONDA (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE

B.Sc III YEAR (2017-18) SEMESTER-VI PAPER-VII

SYLLABUS

DATABASE MANAGEMENT SYSTEMS

UNIT-I

DATABASE DESIGN: The Information System, The Systems Development Life Cycle, The Database Life Cycle, Database Design Strategies, Centralized Vs Decentralized design.

TRANSACTION MANAGEMENT AND CONCURRENCY CONTROL: What is transaction, Concurrency control, Concurrency control with locking Methods, Concurrency control with time stamping methods, concurrency control with optimistic methods, database recovery management.

UNIT-II

DISTRIBUTED DATABASE MANAGEMENT SYSTEMS: The evolution of Distributed Database Management Systems, DDBMS advantages and Disadvantages, Distribution Processing and Distribution Databases, Characteristics of Distributed database management systems, DDBMS Components, Levels of Data and Process distribution, Distributed database Transparency Features, Distributed Transparency, Transaction Transparency, Performance Transparency and Query Optimization, Distributed Database Design, Client Server VS DDBMS.

UNIT-III

THE DATA WAREHOUSE: The need for data analysis, Decision support systems, The data warehouse, Online analytical processing, Star schemas, Data mining, SQL extension for OLAP.

UNIT-IV

DATABASE ADMINISTRATION: Data as a Corporate asset, The need for and role of databases in an organization, The evolution of the database administration function, The database environment's Human Component, Database administration Tools, The DBA at work: Using Oracle for Database Administration.

Prescribed Text Book: Peter Rob, Carlos Coronel, Database Systems Design, Implementation and Management, Seventh Edition, Thomson (2007) **Reference Books:**

- 1. Elimasri / Navathe, Fundamentals of Database Systems, Fifth Edition, Pearson Addison Wesley (2007).
- 2. Raman A Mata Toledo/Panline K Cushman, Database Management Systems, Schaum's Outlibe series, Tata McGraw Hill (2007).
- 3. C.J.Date, A.Kannan, S.Swamynathan, An Introduction to Database Systems, Eight Edition, Pearson Education (2006).
- Michel Kifer, Arthur Bernstein, Philip M. Lewis, Prabin K. Pani Graphi, Database Systems: An application oriented Approach, second edition, pearson education (2008).

 Atul Kahate, Introduction to Database Management Systems, Pearson Education (2006).

abase (2008).

On Challe Studies in Conjunt Science Science NAI GONDA, N.G. College, NAI GONDA,

Department 0) computer

Department 0) computer

Science & Informatics

Science & Informatic

CARATIC ROSU 08682 248438

Dept. Degree College NALGONDA. (A.P.

61

NAGARJUNA GOVT. DEGREE COLLEGE:NALGONDA (AUTONOMOUS) DEPARTMENT OF COMPUTER SCIENCE B.Sc III YEAR(2017-18) SEMESTER-V PAPER-VI **SYLLABUS** WEB TECHNOLAGIES

Total Marks 70

UNIT-I

Introduction: HTML, XML, and the World Wide Web.

UNIT-II

HTML: Basic HTML, The Document body, Text, Hyperlinks, Adding more formatting, Lists, Tables, Using colors and images, Images.

UNIT-III

MORE HTML: Multimedia objects, Frames, Forms-towards interactivity, The HTML document Head in detail, XHTML- An evolutionary markup.

CASCADING STYLE SHEETS: Introduction, Using styles: Simple examples, Defining your own styles, Properties and values in styles, Style sheets- A worked example, Formatting blocks of information, Layers.

UNIT-IV

AN INTRODUCTION TO JAVA SCRIPT: What is dynamic html, Java Script, Java script—The basics, Variables, String manipulation, Mathematical functions, Statements, Operators, Arrays, Functions.

Prescribed Book:

1. Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley (2007)

Reference Books:

- Paul S. Wang Sanda S. Katila, An Introduction to Web Design Plus Programming, Thomson(2007).
 - 2. Robert W.Sebesta, Programming the World Wide Web, Third Edition, Pearson Education (2007).
 - 3. Thomas A.Powell, The Complete Reference HTML & XHTML, Fourth Edition, Tata McGraw Hill (2006).
 - 4. Abders Moller and Michael Schwartzbach, An Introduction to XML and Web Technologies, Addison Wesley (2006).
 - 5. Joel Sklar, Principles of Web Design, Thomson (2007).

6. Raj Kamal, Internet and Web Technologies, Tata McGraw Hill (2007). Board of Studies in Computer Scie

7. Deitel, et al., Internet and World Wide Web: How to Program, 3rd Edition, PHI (2008)G. College, NALGONDA.

Gopalan & Akilandeswari, Web Technology: A Developer's Perspective, PHI (2008).

Bost Dedice Callede tor Mome! Ramadiri, NALGONDA. (A.P.)

CHAIRMA

Department of Computer Department of Reinformatics Science & informatics Mahatma Ganohi University Talgonda-508 001.

NAGARJUNA GOVT. DEGREE COLLEGE:NALGONDA (AUTONOMOUS) DEPARTMENT OF COMPUTER SCIENCE B.Sc III YEAR(2017-18) PAPER-VIII **SEMESTER-VI SYLLABUS** WEB TECHNOLAGIES

UNIT-I

Objects in Java Script: Data and objects in java script, Regular expressions, Exception Handling, Built in objects, Event.

Dynamic HTML with Java Script: Data validation, Opening a new window, Messages and Confirmations, The status bar,

UNIT-II

Dynamic HTML with Java Script: Writing to a different frame, Rollover buttons, Moving images, Multiple pages in a single download, A text-only menu system, Floating logos.

UNIT-III

Active Server Pages and Java: Active Server Pages, Java.

XML: Defining Data for Web applications: Basic XML, Document type definition, XML schema, Document Object Model, Presenting X.

UNIT-IV

Good Design: Structure, Tables versus Frames, Accessibility, Internationalization, Exercises.

Useful Software: Web browsers, Perl, Web servers, mod perl, Databases, Accessing your ISP, Exercises

Protocols: Protocols, IP and TCP, Hyper Text Transfer Protocol, Common Gateway Interface, The Document Object Model, introducing the Document Object Model, Exercises.

Case Study: The plan, The data

Prescribed Book:

Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley (2007)

Reference Books:

- 1. Paul S. Wang Sanda S. Katila, An Introduction to Web Design Plus Programming, Thomson(2007).
- Robert W.Sebesta, Programming the World Wide Web, Third Edition, Pearson Education (2007).
- * Thomas A.Powell, The Complete Reference HTML & XHTML, Fourth Edition, Tata McGraw Hill (2006).
- Abders Moller and Michael Schwartzbach, An Introduction to XML and Web Technologies, CHAIRM Addison Wesley (2006).
- Joel Sklar, Principles of Web Design, Thomson (2007).
- Raj Kamal, Internet and Web Technologies, Tata McGraw Hill (2007).
- Deitel, et al., Internet and World Wide Web: How to Program, 3rd Edition, PHI (2008).
- Gopalan & Akilandeswari, Web Technology: A Developer's Perspective, PHI (2008).

Board of Studies in Computer Sc N.G. College, NALGONDA

Department of Computer Science & Informatics Mahatma Gandhi University. Nalgonda-508 001.

WAKATIVA DECREE CONDA; 60 NO. 08682 248436

Bausairi, MALGONDA. (A.P.)

Sold

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA (AUTOTONOMOUS) (Re Accredited by NAAC with "A" Grade) DEPARTMENT OF COMPUTER SCIENCE B.Sc. (COMPUTER SCIENCE) I YEAR (2017-18)

SEMESTER: I

C LAB

PRACTICAL QUESTION BANK

Practical: 2 Hours/Week

- 1. Write a program to find the largest two (three) numbers using if and conditional operator.
- 2. Write a program to print the reverse of a given number.
- 3. Write a program to print the prime number from 2 to n where n is given by user.
- 4. Write a program to find the roots of a quadratic equation using switch statement.
- 5. Write a program to print a triangle of stars as follows (take number of lines from user):

- 6. Write a program to find largest and smallest elements in a given list of numbers.
- 7. Write a program to find the product of two matrices..
- 8. Write a program to find the GCD of two numbers using iteration and recursion.
- 9. Write a program to illustrate use of storage classes.
- 10. Write a program to demonstrate the call by value and the call by reference concepts.
- 11. Write a program that prints a table indicating the number of occurrences of each alphabet in the text entered as command line arguments.
- 12. Write a program to illustrate use of data type enum.
- 13. Write a program to demonstrate use of string functions string.h header file.
- 14. Write a program that opens a file and counts the number of characters in a file.
- 15. Write a program to create a structure Student containing fields for Roll No.,

Name, Class, Year and Total Marks. Create 10 students and store them in a file.

16.write a program that opens an existing text file and copies it to a new text file uniter Scienwith all lowercase letters changed to capital letters and all other characters offered with all other characters of the second and the the second and

Note:

- 1. Write the Pseudo Code and draw Flow Chart for the above programs.
- 2. Recommended to use Open Source Software: GCC on Linux; Dev C++ (or) Code Blocks on Windows 10.

KAKATIVA DEGREE GONDA. ROED NO. 08682-248436

Dept. Depter Computer Wome, Campatris, HALGONDA, CA.P.

Department of computer

Department of computer

Science & informatics

Science & informatic

8.Write

D

D

D

)

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA (AUTOTONOMOUS) (Re Accredited by NAAC with "A" Grade) DEPARTMENT OF COMPUTER SCIENCE

B.Sc. (COMPUTER SCIENCE) I YEAR (2017-18) SEMESTER: II Object Oriented Programming in C++ Practical

C++ Lab

PRACTICAL QUESTION BANK

Practical: 2 Hours/Week

1. Write a program to.

a. Print the sum of digits of a given number.

- b. Check whether the given number is Armstrong or not
 c. Print the prime number from 2 to n where n is natural number given.
- 2. Write a program to find largest and smallest elements in a given list of numbers and sort the given list.
- 3. Write a menu driven program that can perform the following functions on strings. (Use overloaded operators where possible).

a. Compare two strings for equality (== operator)

b.Check whether first string is smaller than the second (<= operator)

c.Copy the string to another.

d.Extract a character from the string (overload [])

e. Reverse the string.

- f.Concatenate two strings (+ operator)
- 4. Write a program using friend functions and inline functions.
- 5. Write a program to find area of a rectangle, circle, and square using constructors.
- 6. Write a program to implement copy constructor.
- 7. Write a program to demonstrate single inheritance and multiple inheritances.
- 8. Write a program to demonstrate hierarchical inheritance and multipath inheritance(using virtual functions)
- 9. Write a program to demonstrate static polymorphism using method overloading.
- 10. Write a program to demonstrate dynamic polymorphism using method overriding and dynamic method dispatch.
- 11. Write a program to demonstrate the function templates and class templates.
- 12. Write a program to menu driven program for accepting two numbers and perform calculator operations addition, subtraction, multiplication, division and remainder using function template.

13. Write a program to demonstrate exception handling.

CHAIRMAN

14. Write a program to demonstrate various input-output manipulations. NA College. NALGONDA.

- 15. Write a program to implement stack abstract data type.
- 16. Write a program to demonstrate array of objects.

Note: Recommended to use Open Source Software: GCC on Linux; Dev C++ (or) Code Blocks on Windows 10.

Mahatma Gandhi University. Nalgonda-508 001.

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE B.Sc II YEAR(2017-18)

PRACTICAL QUESTION BANK

TIME 3 HOURS

PAPER - III

Max.Marks 50

DATA STRUCTURES LAB

- 1. Write programs to implement the following using an array: a) Stack ADT b) Queue ADT.
- 2. Write a program to convert the given infix expression to postfix expression using stack.
- 3. Write a program to evaluate a postfix expression using stack.
- 4 .Write a program to ensure the parentheses are nested correctly in an arithmetic expression.
- 5. Write a program to find following using Recursion
 - a) Factorial of +ve Integer b) nth term of the Fibonacci Sequence c) GCD of two +ve integers
- 6. Write a program to create a single linked list and write functions to implement the following operations.
 - a. Insert an element at a specified position
 - b. Delete a specified element in the list
 - c. Search for an element and find its position in the list
 - d. Sort the elements in the list ascending order
- 7. Write a program to create a double linked list and write functions to implement the following operations.
 - a. Insert an element at a specified position
 - b. Delete a specified element in the list
 - c. Search for an element and find its position in the list
 - d. Sort the elements in the list ascending order
- 8. Write a program to create singular circular linked lists and function to implement the following operations.
 - a. Insert an element at a specified position
 - b. Delete a specified element in the list
 - c. Search for an element and find its position in the list
- 9. Write programs to implement the following using a single linked list:
 - a. Stack ADT b. Queue ADT.
- 10. Write a program to implement Binary search technique using Iterative method and Recursive methods.
- 11. Write a program for sorting the given list numbers in ascending order using the following technique: Bubble sort and Selection sort
- 12 Write a program for sorting the given list numbers in ascending order using the following technique: Insertion sort and Quick sort
- 13 Write a program for sorting the given list numbers in ascending order using the following technique: Merge sort and Heap sort
- 14 Write a program to traverse a binary tree in following way.
 - a. Pre-order b. In-order c. Post-order
- 15. Write a program to the implementation graph traversals BFS and DFS.
- 16. Write a program to find the minimum spanning tree for a weighted graph using

a. Prim's Algorithm b. Kruskal's Algorithm.

Note:

Write the Pseudo Code for the above programs.

Recommended to use Open Source Software: GCC on Linux; DevC++ (or) CodeBlocks on Windows.

Mahatma Gandhi University. Nalgonda-508 001.

2. No. 08685-5

CHAIRM

Roard of Studies in Compu

M.G. College,

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA (AUTONOMOUS) DEPARTMENT OF COMPUTER SCIENCE

DEPARTMENT OF COMPUTER SCIENCE B.Sc II YEAR(2017-18)

TIME 3 HOURS

PRACTICAL QUESTION BANK PAPER – IV

Max.Marks 50

DATABASE MANAGEMENT SYSTEMS

Consider the relational schema for part of the DreamHome case study is:

Branch (branchNo, street, city, postcode)

Staff (staffNo, fName, IName, position, sex, DOB, salary, branchNo)

PropertyForRent (propertyNo, street, city, postcode, type, rooms, rent, ownerNo, staffNo, branchNo)

Client (clientNo, fName, IName, telNo, prefType, maxRent, eMail)

PrivateOwner (ownerNo, fName, IName, address, telNo, eMail, password)

Viewing (clientNo, propertyNo, viewDate, comment)

Registration (clientNo, branchNo, staffNo, dateJoined)

- 1. Create a database with name "DreamHome" and now create all the tables listed above with constraints.
- 2. Insert a new row into the table supplying data for all columns.
- 3. Modify data in the database using UPDATE
- 4. Delete data from the database using DELETE
- 5. Changing a table definition using ALTER
- 6. Removing a table using DROP
- 7. Removing rows in table using TRUNCATE
- 8. Create an index and removing an index
- 9. Practice other standard SQL commands for creating, modifying, displaying data of tables.
- 10. List full details of all staff.
- 11. List all staff with a salary greater than £10000.
- 12. List the property numbers of all properties that have been viewed.
- 13. Produce a list of salaries for all staff, showing only the staffNo, fName, IName, and salary details.
- 14. List all cities where there is either a branch office or a property for rent.
- 15. List all cities where there is a branch office but no properties for rent.
- 16. List all cities where there is both a branch office and at least one property for rent.
- 17. List the names and comments of all clients who have viewed a property for rent.
- 18. Produce a status report on property viewings.
- 19. List complete details of all staff who work at the branch in Glasgow.
- 20. List the addresses of all branch offices in London or Glasgow
- 21. List all staff with a salary between £20,000 and £30,000.
- 22. Identify all clients who have viewed all properties with three rooms.
- 23. How many properties cost more than £350 per month to rent?
- 24. How many different properties were viewed in May 2013?
- 25. Find the total number of Managers and the sum of their salaries.
- 26. Find the minimum, maximum, and average staff salary.
- 27. Find the number of staff working in each branch and the sum of their salaries.
- 28. List all managers and supervisors.
- 29. Find all owners with the string 'Glasgow' in their address.
- 30. List the details of all viewings on property PG4 where a comment has not been supplied.
- 31. Produce a list of salaries for all staff, arranged in descending order of salary.
- 32. Produce an abbreviated list of properties arranged in order or property type.

Department of Computer
Science & Informatics

RAKATIVA DECREE GONDASON PROPERTY A DECREE GONDASON PROPERTY OF THE PROPERTY O

Dept. of Computer Science Wome College for Wome

a

Board of Studies in Computer S

CHAIRMAN

N.G. College, NALGONDA

33. Find the number of staff working in each branch and the sum of their salaries.

34. For each branch office with more than one member of staff, find the number of staff working in each

branch and the sum of their salaries.

35. List the staff who work in the branch at '163 Main St'.

36. List all staff whose salary is greater than the average salary, and show by how much their salary is

greater than the average.

37. List the properties that are handled by staff who work in the branch at '163 Main St'.

38. Find all staff whose salary is larger than the salary of at least one member of staff at branch B003.

39. Find all staff whose salary is larger than the salary of every member of staff at branch B003

40. List the names of all clients who have viewed a property, along with any comments supplied.

41. For each branch office, list the staff numbers and names of staff who manage properties and the

properties that they manage.

B.Sc. (Computer Science) - Osmania University Page | 15

42. For each branch, list the staff numbers and names of staff who manage properties, including the city in

which the branch is located and the properties that the staff manage.

43. Find the number of properties handled by each staff member, along with the branch number of the

member of staff.

44. List all branch offices and any properties that are in the same city.

45. List all properties and any branch offices that are in the same city.

46. List the branch offices and properties that are in the same city along with any unmatched branches or properties.

47. Find all staff who work in a London branch office.

48. Construct a list of all cities where there is either a branch office or a property.

49. Construct a list of all cities where there is both a branch office and a property.

50. Create a view so that the manager at branch B003 can see the details only for staff who work in his or her

branch office.

51. Create a view of the staff details at branch B003 that excludes salary information, so that only managers

can access the salary details for staff who work at their branch.

52. Create a view of staff who manage properties for rent, which includes the branch number they work at,

their staff number, and the number of properties they manage.

53. Removing a view using DROP VIEW

54. Give the user with authorization identifier Manager all privileges on the Staff table.

55. Give users Personnel and Director the privileges SELECT and UPDATE on college in Computer Sc salary of the Staff table.

56. Revoke the privilege SELECT and UPDATE on college. NALGONDA

56. Revoke the privilege SELECT on the Branch table from all users.

57. Revoke all privileges you have given to Director on the Staff table.

58. Demonstrate exceptions in PL/SQL

59. Demonstrate cursors in PL/SQL

60. Write PL/SQL queries to create procedures.

61. Write PL/SQL queries to create functions.

62. Write PL/SQL queries to create package.

63. Write PL/SQL queries to create triggers.

Departmented Science & Injurial University.

WAKATIVA DE CREE COLLECTE

WAKATIVA DE CREE CONDA:

WAKATIVA DE CREE CONDA:

NO: 08682-248436;

Dept. of Computer for Ware, Och Degree Cullen DA. (A.P.)

64. Write PL/SQL queries using recursion.

Consider the relational schema for part of the Hotel case study is:

Hotel (hotelNo, hotelName, city)

Room (roomNo, hotelNo, type, price)

Booking (hotelNo, guestNo, dateFrom, dateTo, roomNo)

Guest (guestNo, guestName, guestAddress)

- 65. Create a database with name "Hotel" and now create all the tables listed above with constraints.
- 66. Insert a new row into the table supplying data for all columns.
- 67. Modify data in the database using UPDATE
- 68. Delete data from the database using DELETE
- 69. Changing a table definition using ALTER
- 70. Removing a table using DROP
- 71. Removing rows in table using TRUNCATE
- 72. Practice other standard SQL commands for creating, modifying, displaying data of tables.
- 73. List full details of all hotels.
- 74. List full details of all hotels in London.
- 75. List the names and addresses of all guests living in London, alphabetically ordered by
- 76. List all double or family rooms with a price below £40.00 per night, in ascending order of price.
- 77. List the bookings for which no dateTo has been specified.
- 78. How many hotels are there?
- 79. What is the average price of a room?
- 80. What is the total revenue per night from all double rooms?
- 81. How many different guests have made bookings for August?
- 82. List the price and type of all rooms at the Grosvenor Hotel.
- 83. List all guests currently staying at the Grosvenor Hotel.
- 84. List the details of all rooms at the Grosvenor Hotel, including the name of the guest staving in the room.
- 85. What is the total income from bookings for the Grosvenor Hotel today?
- 86. List the rooms that are currently unoccupied at the Grosvenor Hotel.
- 87. What is the lost income from unoccupied rooms at the Grosvenor Hotel?
- 88. List the number of rooms in each hotel.
- 89. List the number of rooms in each hotel in London.
- 90. What is the average number of bookings for each hotel in August?
- 91. What is the most commonly booked room type for each hotel in London?
- B.Sc. (Computer Science) Osmania University Page | 16
- 92. What is the lost income from unoccupied rooms at each hotel today?
- 93. Insert rows into each of these tables.
- 94. Update the price of all rooms by 5%.
- 95. Demonstrate that queries written using the UNION operator and same can be rewritten using the OR. board of Studies in Computer S

96. Apply the syntax for inserting data into a table.

- 97. Create a view containing the cheapest hotels in the world.
- 98. Create the Hotel table using the integrity enhancement features of SQL.
- 99. Create a database trigger for the following situations:
- (a) The price of all double rooms must be greater than £100.
- (b) The price of double rooms must be greater than the price of the highest single room.
- (c) A booking cannot be for a hotel room that is already booked for any of the specified dates.
- (d) A guest cannot make two bookings with overlapping dates.

Department of Computer Science & Informatics Mahatma Gandhi University Malgonda-508 001.

VD. Road, NALGONDA, 36, 100 NO. 08682-248436, 100 NO. 08682-2484436, 100 NO. 08682-2484436, 100 NO. 08682-2484436, 100 NO. 08682-248444, 100 NO. 08682-24844, 1

Govi. Degree College for Wemel Ramagirl, NALGONDA. (A.P.)

www.hig.

N.G. College, NALGOND,

(e) Maintain an audit table with the names and addresses of all guests who make bookings for hotels in London (do not store duplicate guest details). Given relation schemas are Sailors(sid: integer, sname: string, rating: integer, age: real) Boats(bid : integer, bname : string, color : string) Reserves(sid: integer, bid: integer, day: date) 100. Find the names and ages of all sailors. 101. Find all sailors with a rating above 7. 102. Find the names of sailors who have reserved boat 103. 103. Find the sids of sailors who have reserved a red boat. 104. Find the names of sailors who have reserved a red boat. 105. Find the colors of boats reserved by Lubber. 106. Find the names of sailors who have reserved at least one boat. 107. Find the names of sailors who have reserved at least two boats. 108. Compute increments for the ratings of persons who have sailed two different boats on the same day. 109. Find the ages of sailors whose name begins and ends with B and has at least three characters. 110. Find the names of sailors who have reserved a red or a green boat. 111. Find the names of sailors who have reserved a red and a green boat. 112. Find the sids of all sailors who have reserved red boats but not green boats. 113. Find all sids of sailors who have a rating of 10 or have reserved boat 104. 114. Find the names of sailors who have not reserved a red boat. 115. Find sailors whose rating is better than some sailor called Horatio. 116. Find sailors whose rating is better than every sailor called Horatio. 117. Find the names of sailors who have reserved all boats. 118. Find the names of sailors who have reserved at least two boats. 119. Find the names of sailors who have reserved all boats called Interlake. 120. Find sailors who have reserved all red boats. 121. Find the sailor name, boat id, and reservation date for each reservation. 122. Find the sids of sailors with age over 20 who have not reserved a red boat. 123. Find the average age of all sailors. 124. Find the average age of sailors with a rating of 10. 125. Find the name and age of the oldest sailor. 126. Count the number of different sailor names. 127. Find the names of sailors who are older than the oldest sailor with a rating of 10. 128. Find the sailors with the highest rating. 129. Find the age of the youngest sailor for each rating level. 130. Find age of the youngest sailor who is eligible to vote for each rating level with at least 2 such sailors. 131. Find the average age of sailors for each rating level that has at least two sailors. 132. For each red boat, find the number of reservations for this boat. 133. Find the average age of sailors who are of voting age (i.e., at least 18 years old) for each rating level that has at least two sailors. 134. Delete the records of sailors who have rating 8 (deleting some rows in a table).

135. Loading data which is present in the text into the table.

Note: N.G. College, NA Note: Recommended to use open source database software like MySQI, MongoDB, PostgreSQL, etc... In practical examination, students have to ☐ Create database Create tables with their integrity constraints. ☐ Insert the data into tables and then execute the queries. ☐ Answer any six queries from ten queries given by the examiner

Science & informatics ma Gandhi University VA DECKE GONDA36)

Geut. Degree Cullege for MALGONDA. (A.P.)

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA(AUTONOMOUS) B.Sc III YEAR(2017-18)PAPER III DATABASE MANAGEMENT SYSTEM PRACTICAL QUESTION BANK

TIME: 3 HOURS

MAX.MARKS: 50

DBMS LAB

Lab Cycle

Order Tracking Database

The Order Tracking Database consists of the following defined six relation schemas.

EMPLOYEES(<u>ENO</u>,ENAME,ZIP,HDATE)

PARTS(PNO, PNAME, QOH, PRICE, LEVEL) (HINT: QOH: QUALITY ON HAND)

CUSTOMERS(CNO, CNAME, STREET, ZIP, PHONE)

ORDERS(ONO, CNO, ENO, RECEIVED DATE, SHIPPED DATE)

ODETAILS(ONO,PNO,QTY)

ZIPCODES(ZIP,CITY)

Solve the following queries

- 1. Get all pairs of customer numbers for customers based on same zip code.
- 2. Get part numbers for parts that have been ordered by at least two different, customers.
- 3. For each odetail row, get ono, pno, pname, qty and price values along with the total price for the item. (total price=price*qty)
- 4. Get customer name and employee pairs such that the customer with name has placed an order through the employee.

5. Get customer names living in fort dodge or liberal.

6. Get cname values of customers who have ordered a product with pno 10506.

7. Get pname values of parts with the lowest price.

- 8. Get cname values of customers who have placed at least one order through the employee with number 1000.
- 9. Get the cities in which customers or employees are located.

10. Get the total sales in dollars on all orders.

- 11. Get part name values that cost more than the average cost of all parts.
- 12. Get part names of parts ordered by at least two different customers.

13. Get for each part get pno, pname and total sales.

- 14. For each part, get pno, pname, total sales, whose total sales exceeds 1000.
- 15. Get pno, part names of parts ordered by at least two different customers.
- 16. Get cname values of customers who have ordered parts from any one employee based in which it a or liberal.

SHIPMENT DATABASE

AN ENTERPRISE WISHES TO MAINTAIN THE DETAILS ABOUT HIS SUPPLIERS AND OTHER Board of Studies in Computer :

CORRESPONDING DETAILS. FOR THAT IT USES THE FOLLOWING TABLES

TABLE S(SID, SNAME, ADDRESS)

PRIMARY KEY TABLE P(PID, PNAME, COLOR)

: PID PRIMARY KEY

TABLE CAT(SID, PID, COST)

PRIMARY KEY

: SID+PID

REFERENCE KEY

: SID REFERENCES S.SID

PID REFERENCES P.PID

Department of Computer Science & informatics - hatma Gandhi University Gart. Dedies College ter Mowel Mariagiri, NALGONDA. (A.P.)

CHAHRM

N.G. College, MALGOND

Solve the following queries

- 1. Find the pnames of parts for which there is some supplier
- 2. Find the snames of suppliers who supply every part.
- 3. Find the snames of suppliers who suppy every red part.
- 4. Find the pnames of parts supllied by london supplier and by no one else
- 5. Find the sids of suppliers who charge more for some part other than the average cost of that part.
- 6. Using group by with having clause get the part numbers for all the parts supplied by more than one supplier.
- 7. Get the names of the suppliers, who do not supply part p2.
- 8. Find the sids of suppliers who supply a red and a green part
- 9. Find the sids of suppliers who supply a red or a green part

10. find the total amount has to pay for that supplier by part located from London

EMPLOYEE DATABASE

An enterprise wishes to maintain a database to automate its operations. Enterprise divided into to certain departments and each department consists of employees. The following two tables describes the automation schemas

DEPT (DEPTNO, DNAME, LOC)

EMP (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)

- 1. Create a view, which contain employee names and their manager names working in sales department.
- 2. Determine the names of employee, who earn more than their managers.
- 3. Determine the names of employees, who take highest salary in their departments.
- 4. Determine the employees, who located at the same place.
- 5. Determine the employees, whose total salary is like the minimum salary of any department.
- 6. Update the employee salary by 25%, whose experience is greater than 10 years.
- 7. Delete the employees, who completed 32 years of service.
- 8. Determine the minimum salary of an employee and his details, who join on the same
- 9. Determine the count of employees, who are taking commission and not taking commission.
- 10. Determine the department does not contain any employees.
- 11. Find out the details of top 5 earner of company.
- 12. Display those managers name whose salary is more than average salary of his employees.
- 13. Display those employees who joined the company before 15th of the month?
- 14. Display the manager who is having maximum number of employees working under him?
- 15. Print a list of employees displaying 'less salary' if less than 1500 if exactly 1500display as 'exact salary' and if greater than 1500 display 'more salary'?
- 16. Display those employees whose first 2 characters from hire date-last 2 characters of salary?
- 17. Display those employees whose 10% of salary is equal to the year of joining?
- 18. In which year did most people join the company? Display the year and number of employees.
- 19. Display the half of the enames in upper case and remaining lower case
- 20. Display ename, dname even if there no employees working in a particular department (use outer ioin).

University wishes to computerize their operations by using the following relations. Of Studies in Language Student (snum:Integer, sname: string, major: string level: string.

Class (name: String, Hour:Integer, room: string, fid: integer)

Enrolled (sum: integer, cname: string)

Faculty (fid: Integer, fname: String, deptid: Integer)

Depart (deptid: Integer, dname: String, loc: integer)

By using above schema definitions, resolve the following queries

1. Find The Names Of All Juniors (Level=Jr) Who Are Enrolled In A Class Taught By Smith.

Department of Comp Science & Informatics Mahatma Gandhi University, Malgonda-508 001.

- 2. Find The Age Of The Oldest Student Who Is Either A History Major Or Is Enrolled In The Course Of Smith.
- 3. Find The Names Of All Classes That Either Meet R128 Or Have Five Or More Students Enrolled.
- 4.Find The Names Of All Students Who Are Enrolled In Two Classes That Meet At The Same Hour.
- 5. Find The Names Of Faculty Members Who Teach In Every Room In, Which Some Class Is
- 6.Find The Names Of Faculty Members For Whom The Combined Enrollment Of The Courses That They Teach Is Less Than Five.
- 7. Print The Level And Average Age Of Students For That Level, For Each Level.
- 8. Print The Level And Average Age Of The Student For That Level, For All Levels Except Jr.
- 9.Find The Names Of Students Who Are Enrolled In The Maximum Number Of Classes.
- 10. Find The Names of the students who are not enrolled in any class.

Airline Database

An Airline System would like to keep track their information by using the following relations.

Flights (flno: integer, from: string, to: string, distance: integer, Price: integer)

Aircraft (aid: integer, aname: string, cruising_range: integer)

Certified (eid: integer, aid: integer)

Employees (eid: integer, ename: string, salary: real)

Note that the employees relation describes pilots and other kinds of employees as well; every pilot is certified for aircraft and only pilots are certified to fly. Resolve the following queries:

- 1. for each pilot who is certified for more than three aircraft, find the eid's and the maximum cruising range of the aircraft that he (or she) certified for.
- 2.find the names of pilots whose salary is less than the price of the cheapest route from los angeles to honolulu.
- 3.find the name of the pilots certified from some boeing aircraft.
- 4.for all aircraft with cruising range over 1,000 miles, find the name of the aircraft and the average salary of all pilots certified for this aircraft.
- 5.find the aid's of all aircraft that can be used from los angels to chicago.
- 6.print the enames of pilots who can operate planes with cruising range greater than 3,000 miles, but are not certified by boeing aircraft.
- 7.find the total amount paid to employees as salaries.
- 8. find the eid's of employees who are certified for exactly three aircrafts.
- 9.find the eid's of employee who make second highest salary.
- 10.find the aid's of all than can be used on non-stop flights from bonn to chennai.

PL/SQL PROGRAMS

- 1. Write a pl/sql program to check the given number is strong or not.
- 2. Write a pl/sql program to check the given string is palindrome or not.
- 3. Write a pl/sql program to swap two numbers without using third variable.
- 5. Write a pl/sql program to display sum of even numbers and sum of odd numbers in the given number range.

 6. Write a pl/sql program to check the given number is pollingdrome or not position.

 7. The last N.G. Cellege, NALGONDA
- 7. The hrd manager has decided to raise the employee salary by 15%. Write a pl/sql block to accept the employee number and update the salary of that employee. display appropriate message based on the existence of the record in emp table.
- 8. Write a pl/sql program to display top 10 rows in emp table based on their job and salary.
- 9. Write a pl/sql program to raise the employee salary by 10%, for
 - department number 30 people and also maintain the raised details in the raise table.
- 10. Write a procedure to update the salary of employee, who are not getting commission by 10%. 11.write a pl/sql procedure to prepare an electricity bill by using

Department of Computer Science & Informatics Mahatma Gandhi University.

```
Page 4 of 4
```

following table

TABLE USED: SELECT

NAME

NULL? TYPE

MNO NOT NULL NUMBER(3) **CNAME** VARCHAR2(20) CUR READ NUMBER(5) PREV READ NUMBER(5) NO UNITS NUMBER(5) AMOUNT NUMBER(8,2) SER TAX NUMBER(8,2) NET AMT NUMBER(9,2)

12. WRITE A PL/SQL PROCEDURE TO PREPARE AN TELEPHONE BILL BY USING FOLLOWING TABLE. AND PRINT THE MOTHLY BILLS FOR EACH CUSTOMER

TABLE USED: PHONE.

NAME

NULL? TYPE

TEL_NO NOT NULL NUMBER(6) VARCHAR2(20) **CNAME** CITY VARCHAR2(10) PR READ NUMBER(5) CUR READ NUMBER(5) NET UNITS NUMBER(5) TOT AMT NUMBER(8,2)

13. WRITE A PL/SQL PROGRAM TO RAISE THE EMPLOYEE SALARY BY 10%,

WHO ARE COMPLETED THERE 25 YEARS OF SERVICE.

14. WRITE A PL/SQL PROCEDURE TO EVALUATE THE GRADE OF A STUDENT WITH FOLLOWING CONDITIONS:

FOR PASS: ALL MARKS > 40 FOR I CLASS: TOTAL%>59

FOR II CLASS: TOTAL% BETWEEN >40 AND <60

FOR III CLASS: TOTAL% =40

AND ALSO MAINTAIN THE DETAILS IN ABSTRACT TABLE. TABLES USED TABLE STD

SQL> DESC STD

NAME NULL? TYPE

NOT NULL NUMBER NO NAME VARCHAR2(10) INTNO NUMBER

CLASS NOT NULL VARCHAR2(10)

M1 NUMBER M2 NUMBER M3 NUMBER NUMBER M4 M5 NUMBER

TABLE ABSTRACT

SQL> DESC ABSTRACT

NULL? TYPE NAME

STDNO NUMBER **STDNAME** VARCHAR2(10) CLASS VARCHAR2(10) **INTNO** NUMBER TOT NUMBER GRADE VARCHAR2(10) PERCENT NUMBER DAT_ENTER DATE

15. WRITE A PROCEDURE TO UPDATE THE SALARY OF EMPLOYEE, WHO BELONGS TO CERTAIN DEPARTMENT WITH A CERTAIN PERCENTAGE OF RAISE.

Department of Computer Science & informatics atma Gandhi University. WD. Road, NALGONDA.

Board of Studies in Computer Sele N.G. College, NALGONDA.

Walled My GONO Govi. Degree

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA

(AUTONOMOUS) DEPARTMENT OF COMPUTER SCIENCE B.Sc III YEAR(2017-18) WEB PROGRAMMING

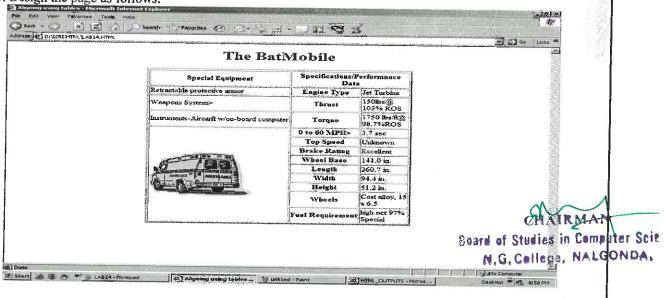
PRACTICAL QUESTION BANK

TIME: 3 HOURS <u>Lab Cycle</u>

MAX.MARKS: 50

- 1. Write a HTML program illustrating text formatting.
- 2. Illustrate font variations in your HTML code.
- 3. Prepare a sample code to illustrate links between different sections of the page.
- 4. Create a simple HTML program to illustrate three types of lists.
- 5. Embed a real player in your web page.
- 6. Embed a calendar object in your web page.
- 7. Create an applet that accepts two numbers and perform all the arithmetic operations on them.
- 8. Create nested table to store your curriculum.
- 9. Create a form that accepts the information from the subscriber of a mailing system.

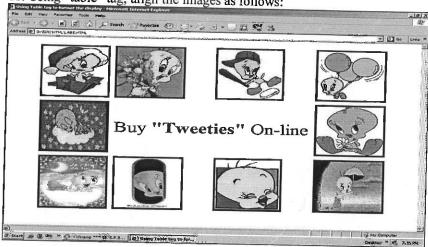
10. Design the page as follows:



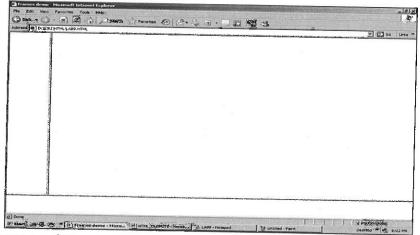
Day

Page 2 of 5

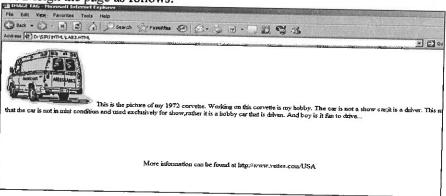
11. Using "table" tag, align the images as follows:



12. Divide the web page as follows:



13. Design the page as follows:

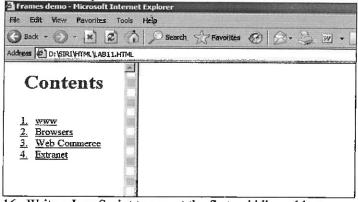


T-3

Dury

14. Illustrate the horizontal rulers in your page.

15. Create a help file as follows:



- 16. Write a Java Script to accept the first, middle and last names of the user and print the name.
- 17. Evaluate the following:
 - a) "10"+"90"
 - b) (10<8)>10:8
 - c) J=(i++)+(-i)+(++i)+(i++) where i=2
- 18. Write a Program in Java Script to add two numbers.
- 19. Write a script to find the factorial of a given number using functions.
- 20. Write a script to print all primes with in the given range.
- 21. Write a program to sort the array elements using "Bubble Sort" technique.
- 22. Write a program in Java Script to implement "Binary Search" technique.
- 23. Write a script to print all perfect numbers with in the given range.
- 24. Write a script to evaluate the following expression:

$$1+2/2! +3/3! + + n/n!$$

- 25. Write a program to implement "Stack" operations.
- 26. Write a script to print Fibonacci series recursive functions.
- 27. Using a ternary operator, write a script to validate the withdrawal transaction of a customer. If he with draws more than his balance, such a transaction should be disallowed.
- 28. Write a script to wish the user "Good Morning" at different hours of the day.B.Sc(Computer Science): III Year: Lab-4.1 (Continued).
- 29. Prompt the user for the cost price and selling price of an article and output the profit or loss percentage.
- 30. Create a customer profile for data entry of customers in a hotel. The profile should prompt for the name, address, gender, age, room type, mode of payment of the customer.

Dules

31. Create a student registration system with the following fields:

Name, Regdno, Gender, street, city, state, pincode, stdcode, phone, dbirth, college, experience, course code. Create a main object called "Stu_info" with all the fields and "College" and "Experience" as sub objects with in the main object. Create separate object definition for College and Experience with the following fields:

College: Name, Location, Degree

Experience: Employer, Location, Duties and Period

32. Write a script to read information of 'n' students from the user and store them into the table as follows:

| No. | Name | Marksl | Marks2 | A.Tarka3 | Tota |
|-----|---------|-------------|--------|----------|------|
| 1: | Sipt: | 100 | 20 | 78 | 268 |
| 2 | Baliloo | 9 03 | 78 | 90 | 258. |
| 3 | Sarayu | 30 | .89 | (78) | 257 |

33. Write the script for the various validations given below:

- a. Candidate code should be generated
- b. Date of Birth should not be null and age should be more than 21.
- c. All alphabet fields should be validated.
- d. All number fields should accept only numbers.
- e. Total experience should be calculated and displayed after accepting input for the "From" and "To" fields in the table.
- 34. Create a bio-data format with the following fields:

Name, candidate code, Date of birth, Gender, Address1, Address2, Phone, Passport number, Qualification and Percentage.

Also, create the following fields for entering present employment details:

Company name Company Address1, Address2, Address3, Phone, Fax, E-mail, Total Experience and Project details.

Create a table with the columns given below in a 3 row structure:

Employer name, Location, From, To, Field

35. Create a web page for a shopping mall that allows the user to tick off his purchases and obtain a

bill with the total being simultaneously added up. The web page must follow the specifications as

given below:

a. The entire web page must be divided into four portions. The top most portion states the name of the mall, the middle portion of the web page is divided vertically into two, the types of the items available in the mall are displayed on the left side and a detailed description of each item with the prices are available on the right. Finally, the bottom most portion of the web page must display the cash memo with the total along side.

b.Each item in the left hand frame must have a link to the file containing its detailed description, which must be displayed in the right hand frame. Ensure that the user is able to perceive only that portion of the file that is related to the item on which he



clicked. Prior to the link being activated, the right hand frame must display a friendly message that gives an idea about its latter contents.

- 36. Design a simple calculator.
- 37. Write a DHTML program to give different colors for different heading tags.
- 38. Using DHTML, invert the behavior of <h1> to <h6> tags.
- 39. Create an inline style sheet for your web page.
- 40. Create an external style sheet for creating a font family.
- 41. Illustrate the creation of embedded style sheet.
- 42. Illustrate the procedure of creating user-defined classes.
- 43. Write an ASP script to send the information accepted from the user and send it to a CGI script.
- 44. Write an ASP script to update the student information with some number 'n' in the table.

45. Delete the desired student's record from the table using the ASP Script.

Department of Computer Science & Informatics Mahatma Gandhi University Nalgonda-508 001.

of Computer Science De des Colless la Me Ramagiri, NALGONDA.

CHAIRMAN Board of Studies in Computer Science N.G. College, NALGONDA.

O

J

)

NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS), NALGONDA TENTATIVE SCHEME OF EVALUATION

COURSE: B.Sc.,

SUBJECT: Computer Science

2017-18

Semester: IV

Module: <u>C PROGRAMMING</u>

Time: 2:30 Hours

PAPER -I

Max. Marks: 70

PART-A

I. Answer the following questions in one or two sentences.

5x2=10

- 1. What is RAM?
- 2. What is Compiler?
- 3. What is Array?
- 4. Define Enumerated Data type?
- 5. Explain C Tokens?

PART-B

II. Answer any four questions from the following not exceeding 20 lines.

4x5=20

- 6. Explain about Control Statements?
- 7. What is String. And Explain It?
- 8. What is Call- By Value. Explain?
- 9. Write a Program to find Factorial of a given Number?
- 10. What is Algorithm? Explain its Characteristics
- 11. Explain Call-by- address?

PART-C

III. Answer the following questions not exceeding 40 lines

4x10=40

12. A) Explain about Different Data types in C language?

OR

- B) What is Operating System?
- 13. A) Explain Looping Statements with an Example Program?

OR

- B) Write a Program Matrix multiplication using Arrays?
- 14. A) What is Storage class? Explain Different types of Storage classes?

OR

- B) What is Pointer? Give to suitable example programs.
- 15. A) Define the Structure? Explain it with an Example program

OR

B) Explain about Working with Binary Files.

Board of Studies In Computer Science N.G. College, NALGONDA

Department of Computer Science & Informatics Mahatma Gandhi University Nalgonda-508 001

Govt. Degree College for

NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS), NALGONDA

TENTATIVE SCHEME OF EVALUATION

COURSE: B.Sc.,

SUBJECT: COMPUTER SCIENCE

2017-18

SEMESTER: II

Module: C++ PROGRAMMING

Time: 2:30

PAPER-II

Max.Marks:70

PART-A

I. Answer the following questions in one or two sentences.

5x2=10

- 1. What is an Exception?
- 2. What is a Array?
- 3. What is a Class?
- 4. Define the Constructor?
- 5. Define the Inheritance?

PART-B

II. Answer any four questions from the following not exceeding 20 lines.

4x5=20

- 6. Explain about OOPs?
- 7. Write a short note on Data types?
- 8. What is Virtual Function?
- 9. Explain about Polymorphism?
- 10. Explain about Unformatted I/O Operations.

PART-C

III. Answer the following questions not exceeding 40 lines.

4x10=40

Department of Computer Science & informatics Mahatma Gandhi University. Nalgonda-508 001.

12. A) Explain about Control structures in C++.

OR

- B) What is Function? Explain about Call-by-value?
- 13. A) Explain about Operator overloading?

OR

- B) Write a Program to implement copy constructor?
- 14. A) Explain about Different types of inheritances?

OR

B) Explain Friend functions and Inline functions?

15. A) Explain about Exception Handling in C++?

OR

B) Explain about Templates?

ROSIS OF Studies in Computer Scienc WAKATTVA DEGREE COLLEG HYD. Road; 08682 248436)

of Computer Sci

Dedree College for

NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS): NALGONDA

TENTATIVE SCHEME OF EVALUATION

COURSE: B.Sc.,

SUBJECT:- COMPUTER SCIENCE

2017-18

SEMESTER: III

Module: DATA STRUCTURES USING C++

Time: 2:30

PAPER-III PART-A

Max.Marks:70

I. Answer the following questions in one or two sentences.

5x2=10

- 1. What is Data Structure?
- 2. What is rear?
- 3. What is a Stack?
- 4. Define Graph?
- 5. Define the Linked List?

PART-B

II. Answer any four questions from the following not exceeding 20 lines.

4x5 = 20

- 6. Explain Postfix with Example?
- 7. What is Circular Queues?
- 8. What is DFS?
- 9. Explain about Double Linked List?
- 10. Sort the Numbers 75,42,23,87,96,65,12,36 by using Insertion Sort?

PART-C

III. Answer the following questions not exceeding 40 lines.

4x10=40

12. A) What is Flowchart? Explain it With Example Program?.

OR

- B) Explain about String Manipulation?
- 13. A) Explain about Double Ended Queues with example?

OR

- B) Write a Program for Single Linked List?
- 14. A) Explain about Binary concepts?

OR

- B) Explain Prim's And Kruskal's Algorithm?
- 15. A) Explain about Heap Sort with Example?

OR

B) Write a Program by using Quick Sort?

CHATRIAN

CHATRIAN

CHATRIAN

KAKATIVA DEGREE CO

Road, NALGONDA

N.G. College, NaLGONDA HYD. Road, NALGONDA. BASA NO: OBG82 248436

Degree College for Wou Ramagirl, NALGONDA. (A

Department of Computer Science & Informatics Mahatma Gandhi University, Nalgonda-508 001.

NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS) , NALGONDA

TENTATIVE SCHEME OF EVALUATION

COURSE: B.Sc.,

SUBJECT: COMPUTER SCIENCE 2017-18

PAPER-IV SEMESTER: IV

DATABASE MANAGEMENT SYSTEMS

Time: 2:30 Hours

Max. Marks: 70 PART-A

I. Answer the following questions in one or two sentences.

5x2=10

- 1. What is Transaction?
- 2. What is Generalization?
- 3. What is Super key?
- 4. Define Trigger?
- 5. Define Aggregation?

PART-B

II. Answer any four questions from the following not exceeding 20 lines.

4x5 = 20

- 6. Explain about Keys?
- 7. What is an Operator Explain Different types of Set Operators?
- 8. Write about GROUPBY?
- 9. Explain E-R MODEL?
- 10. What is about Serializability?
- 11. Explain about BCNF.

PART-C

- III. Answer the following questions not exceeding 40 lines
- 12. A) Explain about Components of DBMS?

OR

- B) What is Data Base? Explain its Advantages?
- 13. A) What is about VIEW?

OR

- B) Explain about SQL Command?
- 14. A) What is Normal Form? Explain 1NF, 2NF and 3NF?

OR

- B) What is Specialization and Generalization?.
- 15. A) Define Deadlock? Explain Time stamp methods?

OR

B) Explain about Data Base Security?.

Department of Computer Mahatma Gandhi University, Nalgonda-508 001.

KAKATIVA DECREE COLLEGE HYD. Road, NALGONDA, Phone No. 02620 Phone No: 08682-248436

Board of Studies in Computer Science N.G. College, NALGONDA.

FACULTY OF SCIENCE B.Sc III Year: SEMESTER-V 2017-18 Subject:- DATABASE MANAGEMENT SYSTEMS PAPER-V MODEL PAPER

Time 2 1/2 Hours

Max. Marks 70

PART-A

I. Answer the following question in one or two sentences

5x 2 = 10

- 1. What is a Data Inconsistency?
- 2. What is a the Physical Model?
- 3. Define a Key.
- 4. Define an Entity.
- 5. Define a Normal form.

PART-B

- II. Answer any four questions from the following not exceeding 20 lines 4X5 = 20
 - 6. Explain about Files and File Systems.
 - 7. Explain about Degree of Data Abstraction.
 - 8. Write about Codd's relational database rules.
 - 9. Write about Entity clustering.
 - 10. Explain about Data Definition Commands.
 - 11. Write about a Relational Set Operators.

PART-C

- III. Answer the following questions not exceeding 40 lines
 - 12. a). Explain about role and advantages of the DBMS.

OR

- b). Explain about The evaluation of Data Models.
- 13. a). Explain about an Integrity Rules

OR

- b)Write about The ER Model
- 14.a) Explain about The Extended Entity Relationship Model

OR

- b) Write about High level Normal Forms
- 15.a)Explain about Data Manipulation Commands.

OR

b) Write about SQL Join Operators

Coxt. Dedies Cullede tor Wows Ramagirl, NALGONDA. (A.P. Department of Computer Science & Informatics Mahairna Gandhi University Nalgonda-508 001.

4X10=40

KAKATIVA DEGREE COLLEGE NAI GOND HYD. Road, NAI GOND Phone No: 08682-248,36

ed of Studies in Computer Ceience

FACULTY OF SCIENCE B.Sc III Year SEMESTER-V 2017-18 SUBJECT :- WEB TECHNOLOGIES PAPER-VI MODEL PAPER

Tim 2 1/2 Hours

Max. Marks 70

SECTION-A

I. Answer the following questions in one or two sentences.

5x2=10

- 1. What is HTML?
- 2. Define Hyperlink?
- 3. Define the URL?
- 4. What is Data types in JavaScript?
- 5. What is Image?

Part-B

- II. Answer any four questions from the following not exceeding 20 lines. 4x5 = 20
- 6. Write short notes on XML?
- 7. Explain about HTML Heading tags?
- 8. Explain Multi frames with an Example Program?
- 9. Explain about XHTML?
- 10. Explain about HTML document body?
- 11. Explain about Different Data types in JavaScript.?

Part-C

Board of Swifts in Computer Scien III. Answer the following questions not exceeding 40 lines.

12. A) What is WWW?

OR

- B) Define the Internet. And Explain Internet services?
- 13. A) what is Table? And explain it with an Example Program?
 - B) Explain about Different types of List with an example Program
- 14.A) What is Form? And Explain about Different types of Form Components?

OR

- B) What is DHTML? And Explain Different types of Style sheets?
- 15. A) What is JavaScript. And Explain it Any Example Program?
 - B) Explain Conditional Statements and Control Statements in JavaScript?

Ramagiri.

FACULTY OF SCIENCE

B.Sc III Year: SEMESTER -VI 2017-18 Subject:- DATABASE MANAGEMENT SYSTEMS

PAPER-VII MODEL PAPER

Time 2 1/2 Hours

PART-A

I. Answer the following question in one or two sentences

5x 2 = 10

Max. Marks 70

- 1. What is The Information System?
- 2. What is transaction?
- 3. What is a Data fragmentation?.
- 4. Define an Integrated.
- 5. Write about DBA.

PART-B

I. Answer any four questions from the following not exceeding 20 lines

4X5=20

- 6. Explain about SDLC.
- 7. Explain about Concurrency controls.
- 8. Write about DBMS Components.
- 9. Write about SPSD.
- Explain about OLAP.
- 11. Write about a Data Backup and Recovery methods.

PART-C

III. Answer the following questions not exceeding 40 lines

4X10=40

12. a). Explain about Database Development Life Cycle.

OR

- b). Explain about Database Recovery Management.

CHAIRMAN

- OR

 CHAIR MAN

 Scie

 CHAIR MAN

 Scie

 CHAIR MAN

 Scie

 CHAIR MAN

 Scie

 NALGONDA:

 a) Explain about Data Warehouse.

 OP
- a) Explain about Data Warehouse.

- b) Write about Multidimensional OLAPS
- a) Explain about the Database Environment's Human Component.

OR

b) Write about Database Security.

Department of Compu Science of Informatics Mahatma Canchi University Nalgonda-508 001:

FACULTY OF SCIENCE B.Sc III Year SEMESTER-VI 2017-18 SUBJECT: WEB TECHNOLOGIES PAPER-VIII **MODEL PAPER**

Time:2:30

Max.Marks:70

I. Answer the following questions in one or two sentences

5x2=10

- 1. What is Object?
- 2. What is Event?
- 3. Define DHTML?
- 4. What is Regular Expressions?
- 5. What is GET()?

Part-B

II.Answer any four questions from the following not exceeding 20 lines. 4x5 = 20

- 6. Explain Document Object?
- 7. Explain about XML?
- 8. Write the Principles of Good design?
- 9. What is PERL?
- 10. Explain CGI?
- 11. Explain About Differences between the GET() And POST()

Part-C

III. Answer the following questions not exceeding 40 lines.

4x10=40

posed of Studies in Computer S

B.G. College, NALGON

12. A) Explain About Exception handling with an example Program?

OR

B) Explain about Events With an Example Program?

13. A) What is Data Validation?

- B) Explain about Rollover Buttons?
- 14. A) what is ASP? And Explain Its Objects?

- B) Explain XML DOM?
- 15. A) Define Protocol? Explain Different Types of Protocol?

B) Explain about XML Schema?

Department of Computer Science & Informatics Mahatma Gandhi University Malocada-508 001.

N. Man, 08885-548